

1 UNITED STATES DISTRICT COURT.  
2 WESTERN DISTRICT OF WASHINGTON AT SEATTLE

3  
4 MICROSOFT CORPORATION, )  
5 Plaintiff, ) C10-01823-JLR  
6 v. ) SEATTLE, WASHINGTON  
7 MOTOROLA INC., et al, ) November 16, 2012  
8 Defendant. ) TRIAL DAY 4  
9 )

10 VERBATIM REPORT OF PROCEEDINGS  
11 BEFORE THE HONORABLE JAMES L. ROBART  
12 UNITED STATES DISTRICT JUDGE

13 APPEARANCES:

14  
15  
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21 Howard and Shane Cramer

22 For the Defendants: Jesse Jenner, Ralph Palumbo,  
23 Philip McCune, Kevin Post, Tom  
24 Miller, James Batchelder and  
25 Steven Pepe

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1 THE COURT: Please be seated, ladies and gentlemen.  
2 We haven't done this for awhile, so let's have the clerk call  
3 this matter.

4 THE CLERK: Case C10-1823, Microsoft versus Motorola.  
5 Counsel, please make your appearance.

6 MR. HARRIGAN: Art Harrigan representing Microsoft.  
7 And next to me is Mr. Pritikin from Sidley; and David  
8 Giardina from Sidley; and Andy Culbert from Microsoft; and  
9 Rick Cederoth from Sidley; and Ellen Robbins from Sidley.

10 MR. JENNER: Jesse Jenner from Ropes representing  
11 Motorola. And with me, some of our usual cast, Mr. Brenner  
12 from Ropes; Mr. Palumbo from Summit; Mr. Pepe from Ropes; Mr.  
13 Post from Ropes; Mr. Batchelder from Ropes; Mr. Miller from  
14 Motorola.

15 THE COURT: Mr. Miller, I'm not sure what to draw  
16 from the fact that you're getting closer to the court.

17 MR. MILLER: Stepping up.

18 THE COURT: Mr. Jenner, I'm in receipt of your  
19 letter. I assume that Microsoft is at this point?

20 MR. JENNER: Yes, sir.

21 THE COURT: Let me give you some observations, and  
22 then I'll ask you to talk, and you can give me your thoughts  
23 on my resolution of this. And then I'll give Microsoft an  
24 opportunity to comment after you.

25 I'm somewhat reminded of the three blind men and the

1 elephant, in that each of us, the two parties and the court,  
2 looks at this situation and sees it in a different light. My  
3 light is that Motorola entered into these agreements with  
4 various third parties and now wants to, in effect, breach  
5 them by using those documents in court, and is asking the  
6 court to, in some manner, accommodate that. And, therefore,  
7 I perceive it as your problem.

8       However, I am mindful from your point of view that many  
9 courts have chosen to close the courtroom and employ complete  
10 confidentiality on existing license agreements, in particular  
11 the rates on those. And I understand the logic for that, and  
12 I used to passionately believe in it when I was in private  
13 practice.

14       The problem is that they are the central issue in this  
15 litigation, and you are properly relying on them as some of  
16 the most important evidence that you have, which puts you  
17 into the dilemma that you're in right now. So let me ask  
18 you, in your remarks, to kind of address the following four  
19 thoughts that I have: One, I believe from looking at the  
20 witness list that this issue doesn't come up today. I'm not  
21 sure about that, but I think that's correct. Secondly, I'll  
22 accept your proposal of new and improved redacted exhibits  
23 which somehow camouflage the party that they refer to.  
24 Third, in further attempting to ruin your weekend even more,  
25 I would like to see briefing on this issue. I've not had an

1 opportunity to read the cryptology case that you cited. I  
2 guess Mr. Palumbo delivered this at 8:30 this morning.

3 I will continue using the procedure that I outlined  
4 originally in terms of it not being disclosed on the public  
5 screen, and trusting the lawyers to not disclose the names  
6 while they examine the witnesses, but the court having access  
7 to the unredacted documents and the parties having access to  
8 it. And I will commit to you that I won't change that  
9 arrangement until we get some further resolution of this  
10 issue. And that would include before the trial ends, or  
11 before the case ends, or at least this portion of the case.

12 However, I'm going to stay with my belief that the context  
13 of the name of the party to the court has significance, if  
14 for no other reason than it would make a difference if we  
15 were dealing with "Ma and Pa Software Company" which has one  
16 product and \$10 in sales, versus Motorola negotiating with  
17 Microsoft, or IBM, or Google, or whoever. It seems to me  
18 that context is essential to understand the royalty rates  
19 that are being discussed in the agreements and being asked to  
20 be the basis of the court's decision.

21 My thought is, if we proceed in this manner, if you're  
22 unhappy with what I've done, you can go to the Court of  
23 Appeals and seek some kind of relief before we publish our  
24 findings and conclusions, and therefore trigger this  
25 avalanche of information that I assume most people are here

1 watching the trial to see what crumbs fall to the floor from.  
2 And that will be helpful guidance for both of us. But it  
3 will also give you -- it should avoid the question of an  
4 advisory opinion, because it will give you a fixed mandate  
5 from the court, this is what's going to happen otherwise. So  
6 that should ease your path, somewhat, to the circuit.

7 So that would be my suggestion on how we proceed. And I  
8 welcome your comments.

9 MR. JENNER: Thank you, Your Honor. I feel a little  
10 bit in the lion's den here. I think I should probably point  
11 out --

12 THE COURT: I'm happy to hear you didn't say the zoo.

13 MR. JENNER: If it is a zoo, it's all new animals  
14 we've never seen before. I should, in fairness, point out  
15 that we're advised, I believe this is correct, that Microsoft  
16 does not join in our request. I imagine that comes as no  
17 surprise.

18 THE COURT: That's why I'm giving them a chance to  
19 talk last here.

20 MR. JENNER: I should point that out.

21 You are correct, we do not have any witnesses today, at  
22 least from our perspective, that would need to get into this  
23 information, so that we do have the weekend to try to grapple  
24 with all these issues and try to figure out how to deal best  
25 with it moving forward.

1 And, if I understand, Your Honor is saying that you are  
2 accepting the proposal that we submit a new set of numbered  
3 but unnamed exhibits, so that as we refer to the number of  
4 exhibits, the gallery, at least on the record, won't have any  
5 reason to recognize who the exhibit is. If they put it  
6 together, they put it together. But that's okay to proceed  
7 that way?

8 THE COURT: That's correct.

9 MR. JENNER: As far as briefing on the issue is  
10 concerned, we will certainly do that over the weekend. Could  
11 I ask Your Honor for a little clarification, perhaps on more  
12 precisely what the issue is that you want us to address?

13 THE COURT: Well, I'm trying to give you something  
14 that you can use to go up to the circuit.

15 MR. JENNER: Yes.

16 THE COURT: So you can say, this is what that  
17 crotchety old fool wants to do, and this is why it's wrong.  
18 And that's why I'm giving you this fixed target to shoot  
19 against, which is that I reserve the right, at the point that  
20 they become a matter of significance in my ruling on this  
21 issue, to make these license agreements a matter of public  
22 record.

23 MR. JENNER: Right, okay. I think I understand.

24 Continuing with the procedure that the court has set forth  
25 in your order earlier this week, we understand with the



1 overlay that we would be, where necessary, using the numbered  
2 exhibits rather than names. I think we can work with that  
3 and hopefully we won't foul it up ourselves by revealing  
4 information, as I think has happened at least once.

5 THE COURT: Well, I find it somewhat ironic that the  
6 party whose information did get blurted out needed two law  
7 firms to tell us that we got it wrong.

8 MR. JENNER: I guess in terms of making this process  
9 work, I will be the first person to admit probable  
10 imperfections in bringing the procedure to pass, but we will  
11 do our best to try to make that work.

12 I do believe that we will try to get some sort of -- I'm  
13 speaking a little bit without authorization, but I think the  
14 plan will be that we will try to seek some sort of an  
15 expedited consideration by the circuit, so that we don't have  
16 Your Honor in the position of waiting indefinitely for  
17 whatever will come out of this.

18 I believe we have been advised informally by some of the  
19 third parties that they may seek to do this themselves  
20 anyway, so there may actually be more than one avenue sought  
21 to try to get that kind of an expedited review. In fact,  
22 maybe if there is more than one, it will garner some more  
23 attention by the circuit. But we understand that Your Honor  
24 does not want or does not intend to wait forever to get this  
25 resolved, so that we will take it upon ourselves to do what

1 we think can be done in the most expeditious way possible.

2 THE COURT: Mr. Jenner, I think we all recognize when  
3 the trial concludes on Tuesday, this portion of it, you are  
4 not going to get a result by Thanksgiving. You're likely not  
5 going to get a result by Christmas or New Year's, probably  
6 sometime in the spring. We have literally, I think we're up  
7 to now 600 pleadings, or something. We've got several days  
8 of trial testimony. We've got several depositions. I think  
9 it was one side or the other had 270 pages of findings and  
10 conclusions, and the other side had a brief 185. It's going  
11 to take us awhile. I'm afraid you outnumber Mr. Fortney and  
12 I about 50 to one, and you've taken full advantage of that to  
13 generate a lot of paper. So, I think I'll have some time.

14 MR. JENNER: Okay. I understand.

15 The other issue I guess I should address is we had  
16 proposed separately in the letter the prospect of a  
17 separately sealed portion on Tuesday, so that in the event  
18 the circuit does not change its views, it would be at least  
19 possible for us to try to avoid breach by withdrawing the  
20 information that might go to the public record. I take it  
21 Your Honor is not inclined to head in that direction?

22 THE COURT: I don't think we need to do that if we  
23 employ the approach that I've taken. As I understand the  
24 testimony in this, Mr. Lynde isn't going to mention the  
25 stuff. Maybe Mr. Harrigan can confirm that.

1 MR. HARRIGAN: Your Honor, I guess it depends on  
2 whether you're talking about our case or rebuttal.

3 THE COURT: We're talking about your case.

4 MR. HARRIGAN: I don't think he's going to  
5 affirmatively deal with that during our case. We don't know  
6 what's going to happen on cross. But the basic problem with  
7 this, Your Honor, is that the issue here is are these  
8 comparable? And comparability involves a host of facts about  
9 each one of them. And I don't think that changing the label  
10 on the exhibit is going to solve anything, because the whole  
11 point is you have to get into the, you know, who is this  
12 licensee? What is the product? What is the technology? So  
13 I don't see how we can cross examine anyone who is presenting  
14 these licenses without getting into the elements that  
15 determine whether they're comparable or not.

16 THE COURT: All right. That's what we're going to  
17 take up Monday after I get a chance to look at your briefing.

18 MR. JENNER: All right. The reason that I mentioned  
19 the separate session Tuesday as a possibility is that even if  
20 we do what Your Honor is contemplating having us do now, I  
21 gather the prospect is still there that if we were successful  
22 in keeping the information confidential through the end of  
23 the trial, and the circuit does not change its views, then  
24 Your Honor would still be in the position of needing to  
25 actually go ahead and disclose the information. So that's

1     why we propose the separate prospect, so if the circuit says  
2     absolutely no, this is the way it's going to be, we would  
3     still have the option to withdraw that information.

4             THE COURT: You always have the option to withdraw  
5     it. If you need to recall a witness because you limited your  
6     examination and you now have decided to take the plunge,  
7     that's fine.

8             MR. JENNER: Strike it?

9             THE COURT: It will then be presented -- if you  
10    decide that you want to present it, it's going to be  
11    presented, and there's no way to then withdraw it. But it  
12    will be presented in the modified form that I've discussed.

13            MR. JENNER: Yes.

14            THE COURT: If, on the other hand, you want to omit  
15    it, sounds like they're going to take up some of these issues  
16    in rebuttal testimony. And so I'm not sure that there's a  
17    way that we can avoid this issue. And I'm confident the  
18    circuit is not going to rule between now and Tuesday. So I'm  
19    afraid I can't let you off the horns of this dilemma. But at  
20    least I can give you a way, if ultimately they tell me I have  
21    it wrong, we will have protected your confidentiality, at  
22    least tried. It sounds like Mr. Harrigan just made my  
23    remarks somewhat more cogent. That's exactly what my concern  
24    is.

25            MR. JENNER: Yeah. Your Honor, could I just have a

1 moment to confer and see if somebody else has a point that  
2 needs to be made?

3 THE COURT: All right.

4 MR. JENNER: I think nothing further on the point at  
5 this time, Your Honor. We will see what we can do with this  
6 over the weekend and get it to Your Honor as expeditiously as  
7 we can.

8 THE COURT: That's fine. Thank you.

9 I believe we're in Microsoft -- and I'm taking it from the  
10 fact that no one has sprung to their feet, that we don't have  
11 any blocked exhibits or closed courtroom issues today.

12 MR. PRITIKIN: We do not, Your Honor.

13 THE COURT: Let's proceed, then.

14 MR. PRITIKIN: Microsoft will call as its next  
15 witness, Professor Tim Simcoe.

16 TIMOTHY SIMCOE

17 Having been sworn under oath, testified as follows:

18 THE CLERK: Will you state your name for the record  
19 and spell your last name, please?

20 THE WITNESS: Timothy Simcoe, S-I-M-C-O-E.

21 THE COURT: You may inquire.

22 DIRECT EXAMINATION

23 BY MR. PRITIKIN:

24 Q Professor Simcoe, could you turn to Tab 53 in your binder?  
25 And can you tell us if this is a copy of your CV?

1 A Yes, it is.

2 MR. PRITIKIN: Microsoft offers Exhibit 53.

3 MR. JENNER: No objection.

4 THE COURT: 53 is admitted.

5 (Exhibit No. 53 was admitted into evidence.)

6 Q Let's go over a couple of the things on it. Can you tell  
7 the court about your educational background?

8 A I have an undergraduate degree from Harvard in applied  
9 math and economics. And I did my graduate work at the  
10 University of California, Berkeley, where I received a  
11 master's in economics, and a Ph.D. in business  
12 administration.

13 Q Where do you work now?

14 A I'm an assistant professor at Boston University School of  
15 Management.

16 Q What do you teach?

17 A I teach strategy and innovation, and I teach data analysis  
18 or statistics.

19 Q Is your research focused in any particular area?

20 A The majority of my research is about standards and  
21 standards-setting organizations.

22 Q Have you published articles in that area?

23 A Yes, I have.

24 Q Approximately how many?

25 A At least a dozen different articles and book chapters on

1 that subject.

2 Q And are you a member of the National Academy of Sciences  
3 Committee on Intellectual Property in Standards Setting  
4 Processes?

5 A Yes, I am.

6 Q What is that?

7 A The National Academies of Science is an organization that  
8 convenes expert panels to work on topics that government  
9 policymakers have an interest in. And so the U.S. Patent and  
10 Trademark Office recently sponsored a panel on the  
11 intellectual property management policies of  
12 standards-setting organizations. And I'm a member of that  
13 panel.

14 Q What opinions have you reached in this matter?

15 A I guess we could summarize my opinions as that  
16 standards-setting organizations have an interest in seeing  
17 the standards that they develop widely diffused and  
18 implemented, because fundamentally standards are about  
19 interoperability, and without broad implementation, they  
20 create little value.

21 In the interests of seeing their standards broadly  
22 implemented, they have rules governing the use of  
23 intellectual property which may be included in a standard.  
24 And those rules are designed, the RAND rule in particular, to  
25 address the problem of hold-up or royalty stacking. And that

1 in the event of a dispute over whether a particular license  
2 is consistent, or proposed license is consistent with the  
3 RAND principles of no hold-up and no royalty stacking, it is  
4 often best to look towards comparables that are available  
5 through collective licensing agreements or pools, because  
6 pools address the same problem of trying to see that the  
7 underlying standard achieves broad diffusion.

8 Q Now, we heard Professor Murphy earlier in the week discuss  
9 hold-up and stacking. What is the perspective that you bring  
10 to these issues, Professor?

11 A Like Professor Murphy, I'm an economist and I can speak to  
12 the underlying economics. But because my research is  
13 primarily focused on standards and standards-setting  
14 organizations, I can speak more to the way those  
15 organizations are put together and what their objectives are,  
16 and how they work.

17 Q Now, were you in the courtroom at the end of the day  
18 yesterday when the court asked Professor Gibson some  
19 questions about the standards-setting process, and what it  
20 means for a patent to be essential?

21 A Yes, I was.

22 Q I want to start with that topic, Professor Simcoe. Can  
23 you tell us a little bit about how standards are developed?

24 A Standards are developed by engineers who meet in working  
25 groups or technical committees. And those engineers



1 represent the interests of the companies that employ them.  
2 And they get together in these technical committees and try  
3 to find some agreement on ways to make their products work  
4 together.

5 Q Now, in this process, do the engineers in the room  
6 typically know if the technology they're evaluating  
7 implicates patents?

8 A My sense is that they don't.

9 Q Do all parts of the standard always implicate patents?

10 A No. Typically a standard has many different pieces to it,  
11 and a great deal of it isn't covered by intellectual property  
12 in any way.

13 Q Now, when some piece of a standard does implicate a patent  
14 or patents, is that specified or called out in the standard?

15 A No, not in the document itself. And typically the people  
16 who are working on it aren't in a position to know whether  
17 there's a patent over what they're working on in advance.

18 Q What does it mean for a patent to be essential to a  
19 standard?

20 A The term "essential" as used by standards-setting  
21 organizations means that there's a mandatory or an optional  
22 part of the specification that if you were to implement it,  
23 you would need to have access to the patent, because the  
24 underlying technology that the standard defines is covered by  
25 the patent.

1 Q Now, suppose the patent relates only to an optional  
2 portion of a standard. Is it still considered essential?

3 A Yes. Standards-setting organizations define this term  
4 "essential" such that a patent is called an essential patent  
5 even if it only reads on an optional part of the  
6 specification.

7 Q Is it still subject to a RAND commitment?

8 A Yes.

9 Q Are all essential patents important or economically  
10 valuable?

11 A No, not necessarily. I think the key thing to recognize  
12 about this essentiality versus valuable distinction, from an  
13 economic point of view, that in order for something to be  
14 valuable it has to be both important in the sense of  
15 providing value to, say, a user of the standard, but it has  
16 to be scarce, it has to be the case that there aren't other  
17 equally good ways of accomplishing the same purpose. And so  
18 if there are lots of ways to do something when we're making  
19 the choice, and we sort of arbitrarily pick one, and that one  
20 happens to be patented, then the essential patent isn't an  
21 economically valuable one.

22 Q Can a patent be essential before the standard is adopted?

23 A No. Because before the standard is defined it's  
24 impossible to know what's essential or not. The standard has  
25 to exist in order for us to assess whether the mandatory or

1 optional parts that are there that give rise to this concept  
2 of essentiality have been defined.

3 Q Now, during the standard setting process, are participants  
4 of the IEEE or the ITU required to conduct a search of their  
5 patent portfolios to identify potentially essential patents?

6 A No, there's no mandatory search rule. And if there were,  
7 participants here are engineers, so they wouldn't do the  
8 search in any case.

9 Q We saw, yesterday, language from an IEEE letter of  
10 assurance which a patentholder represented that it held  
11 patents or patent applications that may be or may become  
12 essential to the standard. Why is the word "may," used in  
13 the letters of assurance?

14 A Because the standards-setting organizations seek to get  
15 these letters of assurance as early in the process as  
16 possible, in order to have those RAND commitments even before  
17 the standard is defined.

18 And so in that case, as we just heard, we can't figure out  
19 whether the patents in question are essential or not, so we  
20 have to think of them as maybe becoming essential.

21 Q Are the parties required to identify their potentially  
22 essential patents in the letters of assurance?

23 A No, you can have a blanket letter of assurance in which  
24 they don't list any particular patents or applications.

25 Q Now, do the standards-setting organizations, like the ITU

1 or the IEEE, do they make a determination of whether patents  
2 are essential to the standard?

3 A No, they do not.

4 Q And when people in the standards community refer to a  
5 "declared" -- have you heard that word, "declared essential  
6 patent," what does that mean?

7 A The term "declared essential patent" is used for a  
8 specific patent or patent application that has been  
9 identified, typically by its owner, as essential. But no one  
10 else has checked to see whether that's the case.

11 Q Now, let's switch gears and talk for a few minutes about  
12 pools. If a company wants to join in the pool process, when  
13 a pool is getting set up, do the pools usually require that  
14 they have at least one essential patent?

15 A Yes, they do.

16 Q And do pools, like MPEG LA and Via, make a determination  
17 of whether a patent is essential or not?

18 A Yes. The pools hire a third-party independent expert  
19 typically to evaluate the patents that are submitted and  
20 ensure that they're essential.

21 Q So when we're talking about patents that are in a pool,  
22 have all the patents that are licensed out by a patent pool,  
23 of the kind we've been discussing in this case, have those  
24 been reviewed and determined by a third party to be  
25 essential?

1 A Yes. Every patent in a pool has gone through a  
2 third-party review process.

3 Q We've heard testimony, I think, that there were over 2,500  
4 patents in the MPEG LA pool. Did someone review all those  
5 2,500?

6 A Yes.

7 Q Now, one other point of possible confusion. We've heard a  
8 lot in the course of the trial about MPEG and about MPEG LA.  
9 Are they related? Are they the same? Are they different?

10 A Those are two different organizations.

11 Q Can you help us with that?

12 A MPEG is the Motion Picture Experts Group, which is a group  
13 of engineers who develop standards for compression and  
14 decompression, and have been doing so for a long period of  
15 time.

16 MPEG LA is the MPEG licensing authority, which is a patent  
17 pool. They happen to have the MPEG as the first part of  
18 their name because the first pool they set up was for  
19 technology developed by the Motion Picture Experts Group.

20 Q In the course of your work, have you examined how SSOs  
21 deal with the incorporation of patented technology in their  
22 standards?

23 A Yes, I've looked at that extensively.

24 Q Are you familiar with the Intellectual Property Policies  
25 in the ITU and the IEEE?

1 A Yes.

2 Q Would you turn, please, to Exhibit 1575? Is this a copy  
3 of the current guidelines for implementation for the common  
4 patent policy for the ITU?

5 A I'm sorry, I don't have 1575.

6 MR. JENNER: We don't have 1575 either. I'm sorry,  
7 here it is. It's toward the back of the binder, if it's the  
8 same as yours, Dr. Simcoe. It's maybe three from the end.

9 Q Did you find it there, Professor?

10 A Yes.

11 Q All right. Can you identify this as the guidelines?

12 A Yes, they are.

13 MR. PRITIKIN: We move the admission of 1575.

14 MR. JENNER: No objection.

15 THE COURT: It is admitted.

16 (Exhibit No. 1575 was admitted into evidence.)

17 Q And would you turn to page 9 of the annex, that has the  
18 stamp number 2815 at the end?

19 A Yes.

20 Q Does this policy contain language indicating that it is  
21 the "sole objective," of the policy, to ensure that a patent  
22 embodied fully or partly in an ITU standard is, "accessible  
23 to everybody without undue constraints."

24 A Yes.

25 Q Is that your understanding of the policy?

1 A Yes.

2 Q Would you turn to Exhibit 1568, which I think is behind  
3 that? And are these the current IEEE standards or bylaws?

4 A Yes, they are.

5 Q Does this set forth the rules of the IEEE IP policy in  
6 Section 6?

7 A Yes.

8 MR. PRITIKIN: Microsoft moves admission of 1568.

9 MR. JENNER: No objection.

10 THE COURT: It is admitted.

11 (Exhibit No. 1568 was admitted into evidence.)

12 Q Let's turn now to Exhibit 1414 in the binder. I think  
13 that's at the very beginning. Hopefully these are going to  
14 be in the order in which we cover them now. Is this a  
15 federal register notice issued by the FTC in 2011, seeking  
16 comments on standards-setting organizations and standard  
17 essential patents?

18 A Yes, it is.

19 Q Can you tell us what this related to?

20 A At the time -- well, the FTC has a long-standing interest  
21 in the potential problem of hold-up and royalty stacking in  
22 the context of licensing standard essential patents. And  
23 from time to time they issue a call for comments or convene a  
24 conference related to that question, to seek advice on the  
25 matter. And so this is an example of that.

1 MR. PRITIKIN: Microsoft moves admission of  
2 Exhibit 1414.

3 MR. JENNER: No objection.

4 THE COURT: It is admitted.

5 (Exhibit No. 1414 was admitted into evidence.)

6 Q Would you turn to the second page of the exhibit? And in  
7 the column on the far left, about two thirds of the way down,  
8 do you see the statement, "The most common mechanism used by  
9 SSOs to prevent patent hold-up is the RAND commitment"?

10 A Yes.

11 Q And is that consistent with your understanding, based on  
12 the review of the IP policies of the organizations?

13 A Yes, I believe that's correct.

14 MR. JENNER: Your Honor, I would interpose -- I don't  
15 know if it's an objection, or request for clarification, but  
16 to the extent it may become important, I believe counsel left  
17 out the words, "to attempt," from the quote.

18 MR. PRITIKIN: I'm sorry if I omitted those. I  
19 didn't intend to.

20 THE COURT: All right.

21 Q Is royalty stacking a concern addressed by RAND?

22 A Yes.

23 Q Now, in your review of the materials in this case, have  
24 you identified any statements by Motorola reflecting a  
25 concern with royalty stacking in the standards context?



1 A Yes, I have.

2 Q Would you turn to Exhibit 1031? And is this a submission  
3 that was made by Motorola with two other companies regarding  
4 RAND to ETSI?

5 A Yes, it is.

6 Q What is ETSI?

7 A ETSI is the European Telecommunications Standards  
8 Institute. It's a standards-setting organization that  
9 develops standards for cell phones and other kinds of  
10 cellular and telecommunication equipment.

11 MR. PRITIKIN: Microsoft moves admission of Exhibit  
12 1031.

13 MR. JENNER: No objection.

14 THE COURT: It is admitted.

15 (Exhibit No. 1031 was admitted into evidence.)

16 Q Would you turn to page two of the document, and in the  
17 third paragraph Motorola wrote, "The increasing tendency for  
18 multifunction multi-technology products means that there are  
19 ever more patents covering the end product, giving rise to  
20 the phenomenon of so-called royalty stacking. Overall,  
21 cumulative royalties are perceived to be uncertain and often  
22 too high, possibly even prohibitive." Do you agree with that  
23 statement that was made by Motorola?

24 A Yes, I do.

25 Q Could you turn to page 3? And I want to direct your

1 attention to the language in Section 6. How did Motorola  
2 propose to address the problem with stacking in connection  
3 with standard essential patents?

4 A Motorola proposed that the FRAND commitment be clarified  
5 by articulating two core principles that I think are central  
6 to the meeting of FRAND, and those principles are listed here  
7 under Section 6.

8 Q Can you explain, briefly, what those are?

9 A The first of them is the idea of aggregated reasonable  
10 terms. So I'll read their language. So they propose, "To  
11 clarify the FRAND obligation means essential patentholders  
12 agree to grant licenses on terms that are objectively  
13 commercially reasonable, taking into account the overall  
14 licensing situation, including the cost of obtaining all  
15 necessary licenses from other relevant patentholders for all  
16 relevant technologies in the end product."

17 And the second principle that they proposed is that of  
18 proportionality. The way they describe that is,  
19 "Compensation under FRAND must reflect the patent owner's  
20 proportion of all essential patents. This is not simply a  
21 numeric equation, but the compensation must, within  
22 reasonable bounds, reflect the contribution."

23 Q Now, are these statements by Motorola consistent with the  
24 approach that you and Professor Murphy advocated?

25 A Yes, I think they're consistent, almost close to the same

1 thing.

2 Q Do you understand these statements by Motorola in this  
3 document to announce some new principles?

4 A No.

5 Q Let's look at page 3 again. And in the paragraph near the  
6 top Motorola wrote that the principles were, "Really in the  
7 nature of clarifications of existing FRAND rules and commonly  
8 understood goals." What do you understand that to mean?

9 A I understand that to mean that they're simply trying to  
10 articulate what's a commonly-held view of the meaning of the  
11 RAND commitment, consistent with the title of the proposal  
12 here, which is minimum change, optimum impact.

13 Q Let's turn to the next exhibit in the binder,  
14 Exhibit 1130. Is this the 1994 operations manual for the  
15 IEEE standards?

16 A Yes, it is.

17 MR. PRITIKIN: Microsoft moves admission of  
18 Exhibit 1130.

19 MR. JENNER: No objection.

20 THE COURT: 1130 is admitted.

21 (Exhibit No. 1130 was admitted into evidence.)

22 Q Would you turn to page 3 of the document? And do you see  
23 the language there that says this is to be used in tandem --

24 MR. JENNER: I'm sorry, counsel, could you say again  
25 where you are?

1 MR. PRITIKIN: Page 3.

2 Q Do you see the language there that says this is to be used  
3 in tandem with the IEEE standards board bylaws? The scope of  
4 these two documents are the rules that govern standards  
5 development, bylaws, and the required procedures to implement  
6 those rules and operations. How do you understand these  
7 documents to relate to each other?

8 A That collectively they form the intellectual property  
9 policy of the IEEE.

10 Q Now, let's turn to Section 6.3.2 on page 19 of the  
11 document. And first, can you tell us what this section is  
12 addressing?

13 A This section describes a requirement that patentholders  
14 submit to the patent committee of the IEEE, a draft license,  
15 prior to incorporating any patented technology into the  
16 standard.

17 Q Now, does it say anything about the terms that are  
18 supposed to be in that license?

19 A Yes.

20 Q What does it say?

21 A It says here that a draft or their license that assures  
22 that the technology will be made available at nominal  
23 competitive costs to all who seek to use it for compliance  
24 with an incorporated IEEE standard.

25 Q Now, how does the requirement that a license at nominal

1 competitive cost relate to the RAND commitment?

2 A It's part of the RAND commitment.

3 Q Let's turn to Exhibit 1407. And is this a blanket letter  
4 of assurance that was submitted by Symbol Technologies with  
5 respect to the 802.11 standard?

6 A Yes.

7 Q And do you understand that Symbol was later acquired by  
8 Motorola?

9 A Yes.

10 Q And that's where some of these patents came from?

11 A Yes, sir.

12 Q When was this submitted?

13 A This was submitted in November, 1993.

14 MR. PRITIKIN: Microsoft moves the admission of  
15 Exhibit 1407.

16 MR. JENNER: No objection.

17 THE COURT: It is admitted may be published.

18 (Exhibit No. 1407 was admitted into evidence.)

19 Q We're going to look at one more letter of assurance.  
20 Would you turn to 2839? Is this a collection of letters of  
21 assurance submitted by Motorola and Symbol with respect to  
22 the 802.11 standard? It's the one that ends with 1823. It  
23 ends in a "4." Do you have that? It is a little hard to  
24 read.

25 A I have it.

1 Q Is this a blanket letter of assurance submitted by  
2 Motorola in 1994?

3 A Yes.

4 Q Now, going back to what we talked about just a few minutes  
5 ago, at the time that Symbol and Motorola submitted these  
6 blanket letters of assurance on 802.11, was the provision of  
7 the operations manual requiring licensing at nominal  
8 competitive costs in place?

9 A Yes, it was.

10 MR. PRITIKIN: If I had not done so, Your Honor, I do  
11 want to move admission of 2839. Perhaps I already did.

12 THE COURT: I believe you did. Any objection?

13 MR. JENNER: No objection.

14 THE COURT: It is admitted.

15 (Exhibit No. 2839 was admitted into evidence.)

16 Q Let's turn to Exhibit 2838, which is in the back. And are  
17 these copies of letters of assurance submitted by Motorola  
18 and its affiliates to the ITU?

19 A Yes, they are.

20 MR. PRITIKIN: Microsoft moves admission of  
21 Exhibit 2838.

22 MR. JENNER: No objection.

23 THE COURT: 2838 is admitted.

24 (Exhibit No. 2838 was admitted into evidence.)

25 Q Professor Simcoe, I want to turn now to the subject of

1 patent pools. Are these sometimes referred to as collective  
2 licensing agreements or arrangements?

3 A Yes. Pools and collective licensing agreements are  
4 synonyms.

5 Q Are collective licensing agreements sometimes abbreviated  
6 CLA?

7 A Yes.

8 Q Do you agree with Professor Murphy that, in the standards  
9 context, pools, where they're available, will often be the  
10 best comparables for a RAND royalty?

11 A Yes, I do.

12 Q Now, in supporting the use of pools as a comparable, are  
13 you suggesting that pool participation should be or somehow  
14 is mandatory?

15 A Not at all, no.

16 Q What are you saying?

17 A We're saying that in the event of a dispute over the terms  
18 and conditions of a license that is being offered subject to  
19 a RAND commitment, you often have to find a way to try and  
20 value the patents. And you're looking for a comparable. And  
21 that often the pools, for a number of reasons, are the best  
22 available comparables.

23 Q In the course of your work on this case, have you reviewed  
24 documents in which Motorola discussed the use of collective  
25 licensing agreements?

1 A Yes, I have.

2 Q Would you turn in your binder, please, to Exhibit 1033?

3 MR. JENNER: Did you say 1033, counsel?

4 MR. PRITIKIN: Yes.

5 Q Is this another submission Motorola made to the same  
6 working group at ETSI?

7 A Yes, it is.

8 Q It was in connection with the minimum-change,  
9 optimum-impact proposal we talked about earlier?

10 A Yes.

11 MR. PRITIKIN: Microsoft moves admission of  
12 Exhibit 1033.

13 MR. JENNER: No objection.

14 THE COURT: 1033 is admitted.

15 (Exhibit No. 1033 was admitted into evidence.)

16 Q In connection with the investigation and work that was  
17 ongoing at ETSI, had other companies proposed the use of  
18 collective licensing agreements for the licensing of standard  
19 essential patents?

20 A Yes. Several of the other companies who are authors on  
21 this proposal had put forward a collective licensing  
22 agreement.

23 Q And in Exhibit 1033, did Motorola comment on these  
24 proposals?

25 A Yes.



1 Q Now, let's look at the first page of the document,  
2 Exhibit 1033. And there are certain key features of  
3 collective licensing arrangements that are discussed there.  
4 How do these compare to the features of patent pools that  
5 you've been describing?

6 A Um, they're the same. I suppose it's worth highlighting  
7 what you think are those key features here. So, in Section 2  
8 under "discussion" it talks about the idea that in collective  
9 licensing agreements the essentiality of a patent is  
10 evaluated by an independent expert, that the terms and  
11 conditions of a license are determined by the members of the  
12 collective licensing agreement, and that the fact that  
13 members are potential licensees implies reasonable terms,  
14 that those terms are public information, and that it provides  
15 the benefit of being a one-stop shop, making it easy for  
16 licensees to access large numbers of essential property  
17 rights for a particular standard. And those are all features  
18 of patent pools that help to make them excellent comparables.

19 Q Now, let's look at the last two paragraphs on the first  
20 page. What did Motorola say about how collective licensing  
21 arrangement proposals related to its proposal to deal with  
22 the stacking problem that we talked about earlier?

23 A At the bottom of this page Motorola says that, "These  
24 kinds of voluntary collective licensing models are all  
25 compatible with and complementary to the minimum-change,

1 optimum-impact approach jointly proposed by Ericsson,  
2 Motorola and Nokia. They fit together comfortably and  
3 synergistically. So I read that as saying their principles  
4 of aggregated reasonable terms and proportionality are met by  
5 the pools.

6 Q Was Motorola saying that pools help solve the problem of  
7 royalty stacking?

8 A Yes, that's how I read this.

9 Q And they're saying that they find them compatible with and  
10 complementary to its approach?

11 A Yes.

12 Q Are you aware in this case Motorola's experts have  
13 characterized pools as discount shops that are biased in  
14 favor of low rates? Have you heard that?

15 A Yes, I'm aware of that.

16 Q Is that what Motorola said in this document?

17 A No.

18 Q Let's look at the next page. And I want to direct your  
19 attention to the second paragraph, Professor. You see  
20 Motorola wrote, "According to the CLA," -- that's collective  
21 license agreement arrangement -- "proposal, the licensing  
22 terms of the CLA will be reasonable due to the dual role of  
23 most of the members, IPR owners, and future licensees, and  
24 made public." What does the dual role of the parties forming  
25 the pool -- why does that suggest terms should be reasonable?

1 A By dual role here they mean that many of the licensors in  
2 the pool will also be licensees to the patents owned by other  
3 pool members. And the fact that they're pointing to a link  
4 between that dual role of licensor and licensee, and  
5 reasonableness of the terms, reflects the idea that pools  
6 have to strike a balance between setting rates and other  
7 terms and conditions that attract a large number of licensees  
8 to make the pool attractive to the licensors. And the pool  
9 has to attract a large number of licensors so that the  
10 licensee's view it is an attractive one-stop shop.

11 Q Now, are you also aware that Motorola and its experts have  
12 suggested in this case that pools are not a good benchmark  
13 for RAND? Have you heard that?

14 A Yes, I have.

15 Q Is that consistent with what Motorola told ETSI before it  
16 got involved in this litigation with Microsoft?

17 A No.

18 Q Let's look at that paragraph, again, that you were  
19 discussing a minute ago. And in the last sentence of the  
20 paragraph Motorola wrote, "This will provide a benchmark for  
21 the level of aggregated reasonable terms, and the  
22 proportionality in the public domain, which will increase  
23 transparency." What do you understand that to mean?

24 A I believe that they're saying pools are good comparables.  
25 They provide a benchmark for RAND terms and conditions.

1 Q Now, you also understand in this case that Motorola and  
2 its experts have criticized pools for supposedly keeping  
3 rates low because of antitrust concerns?

4 A Yes.

5 Q And are there, in fact, antitrust guidelines that address  
6 patent pools?

7 A Yes.

8 Q Would you look at Exhibit 1032 in your binder? And are  
9 these guidelines for licensing of intellectual property  
10 issued by the Department of Justice and FTC in the mid-1990s?

11 A Yes, they are.

12 Q Are they still in place?

13 A Yes.

14 Q Would you turn, please, to page 28. And let's look at the  
15 paragraph at the top of the page. It's talking about  
16 cross-licensing and pooling arrangements. And it says that  
17 they may provide pro-competitive benefits by integrating  
18 complementary technologies, reducing transaction costs,  
19 clearing blocking positions, and avoiding costly infringement  
20 litigation." Do you agree with that?

21 A Yes, I do.

22 Q And have the antitrust agencies reviewed any of the modern  
23 patent pools?

24 A Yes, they have.

25 Q Which ones have they -- have they issued letters with

1     respect to the MPEG LA AVC pool?

2     A    Yes.

3     Q    Was that pool approved by the Department of Justice?

4     A    Yes, it was.

5     Q    Are there features or policies of modern patent pools that  
6     help to address antitrust concerns?

7     A    Yes.

8     Q    And at a high level, can you tell us what those are?

9     A    At a high level, the features of pools that economists  
10    think of as alleviating antitrust concerns are that we have  
11    this third-party independent review process that we talked  
12    about earlier. So by ensuring that each of the patents  
13    licensed in the pool is actually essential to the standard,  
14    it assures that these patents are what are called  
15    "complementary inputs" by economists. And there are many  
16    reasons to think that joint licensing of complementary inputs  
17    is pro-competitive.

18       And the second feature is that the licensors in a pool are  
19    free to license their patents independently of the pool. So  
20    they're not obligated to only license these patents through  
21    the pool.

22    Q    I'm sorry, I may have misspoken on one of my earlier  
23    questions. Had the Department of Justice approved the MPEG-2  
24    pool? Is that the pool that was approved?

25    A    Yes. I think you were referring to the two business

1 review letters issued in the mid-1990s, one for the original  
2 MPEG pool, and the other for the DVD pool.

3 Q All right. Do antitrust rules require that pools charge  
4 low rates?

5 A No.

6 Q Have you reviewed royalty information across a wide range  
7 of patent pools?

8 A Yes, I have.

9 Q For standard essential patents?

10 A Yes. Pools covering standard essential patents.

11 Q What form of royalty is most common in standards-based  
12 pools for consumer products?

13 A For consumer products, the structure of royalties is  
14 typically a fixed price, cents per unit of a licensed  
15 product. Although then you often have volume discounts and  
16 caps, and other features of the pricing structure.

17 Q From an economic perspective, why do you believe that  
18 fixed per-unit rates are common in these standards-based  
19 pools?

20 A Well, I think fundamentally it gets you away from the  
21 problem where if it's just a running percent royalty, and the  
22 base that you're talking about is a cruise ship, as we heard  
23 the other day, or a Boeing jetliner, that percentage of sales  
24 ends up capturing all kinds of value associated with other  
25 parts of the product that have nothing to do with the

1 standard, or the even smaller contribution of the patented  
2 technology that's a small piece of the standard.

3 Q Do pools sometimes vary the fixed amount to some extent,  
4 by field of use of the license device?

5 A Yes. Pools often have different prices for different,  
6 what they call, fields of use, what economists might just  
7 call a market.

8 Q If a particular pool does not have a field of use  
9 distinction, what do you conclude?

10 A If a pool does not have a field of use distinction? Oh,  
11 that they're just licensing in one market, I guess.

12 Q Does the MPEG LA H.264 have different rate structures for  
13 different fields of use?

14 A Yes, it does.

15 Q Can you explain that?

16 A The MPEG H.264 has one rate structure that seems to be set  
17 up for high-volume consumer products; and it has a second  
18 rate structure that seems to be title-by-title video  
19 licensing.

20 Q Now, a patentholder can benefit by getting royalties on  
21 standard essential patents, correct?

22 A Yes.

23 Q How can a patentholder benefit from the incorporation of  
24 its technology into a standard apart from collecting  
25 royalties on patents that it may own?

1 A There are lots of ways that firms can benefit from  
2 incorporating patented technologies into standards, even if  
3 they don't expect to collect any royalty whatsoever. So,  
4 probably the most important example is just that firms make  
5 profits in complementary markets. So a firm that  
6 manufacturers cell phones, or something, computers, benefits  
7 from the diffusion of the standard, because the standard can  
8 increase demand for cell phones or computers and they make a  
9 profit in those other markets.

10 When participating in a standards-setting organization,  
11 firms also can derive a number of benefits from having their  
12 technology included in the standard, as opposed to some  
13 other. So those benefits include things like lower costs in  
14 implementing your own technology, or faster time to market  
15 because you're familiar with it, and that familiarity lets  
16 you develop products that reach the markets sooner than your  
17 competitors.

18 And I guess probably the other big example is you may have  
19 a large installed base of product, and you want the standard  
20 to work well with the product that your existing customers  
21 are already using, and by incorporating your own technology  
22 into the standard, you're better able to make the industry  
23 standard operate with your installed base of products.

24 So, all of those are examples of ways in which a firm  
25 benefits before they collect a royalty. And it helps explain



1 the fact that large numbers of firms make a RAND commitment  
2 and never seek to license their patents or commit to license  
3 their patents on royalty-free terms.

4 Q To ask the question a different way, Professor, are there  
5 motivations that companies have, besides collecting money on  
6 royalties, for contributing their patents and technology to a  
7 standard?

8 A Yes, absolutely. So those are all examples of motivations  
9 to contribute technology to standards that are independent of  
10 any licensing.

11 Q Now, if a company chooses not to participate in a pool,  
12 but to license its patents outside the pool, does that imply  
13 that it has higher-value patents?

14 A No.

15 Q Are those patents still subject to a RAND commitment?

16 A Yes.

17 MR. PRITIKIN: No further questions, Your Honor.

18 THE COURT: Okay.

19 MR. PRITIKIN: Your Honor, I'm informed I neglected  
20 to move admission of 1032. I'll do so now.

21 THE COURT: Any objection, Mr. Jenner?

22 MR. JENNER: The antitrust guidelines? No objection.

23 THE COURT: It is admitted.

24 (Exhibit No. 1032 was admitted into evidence.)

25 CROSS EXAMINATION

1 BY MR. JENNER:

2 Q Dr. Simcoe, you have a copy of the binder in front of you?

3 A Yes.

4 Q Dr. Simcoe, if you would just note that in the back of  
5 your binder there is a copy of your deposition transcript  
6 from August 29, 2012. Do you see that that's there?

7 A Yes.

8 Q Okay. Thank you.

9 Now, Dr. Simcoe, just to establish some yes's and no's.  
10 You're here as an expert on economics and standards-setting  
11 organizations, correct?

12 A Yes, that's correct.

13 Q So you're here testifying as an economist?

14 A I'm here testifying as an expert in economics and  
15 standards-setting organizations.

16 Q You've never been an employee of a standards-setting  
17 organization, correct?

18 A No, I have not.

19 Q You've never been a consultant to a standards-setting  
20 organization?

21 A I've spoken with people who manage standards-setting  
22 organizations on issues, but I've never been a paid  
23 consultant on a standards-setting organization.

24 Q You've never negotiated a RAND license?

25 A No, I have not.

1 Q You've never participated in the negotiation of a RAND  
2 license?

3 A No. That's something I've studied, but never done it.

4 Q Is it the case that you've never participated in the  
5 negotiation of any kind of patent license?

6 A No. I've never been a participant in negotiating a patent  
7 license.

8 Q You've never testified in a patent infringement case about  
9 what a reasonable royalty might be?

10 A This is the first case I've ever testified in.

11 Q So the answer is, you've never testified --

12 A No, I've never testified, no.

13 Q And you've never testified, therefore, about how to apply  
14 the methodology of the *Georgia Pacific* case in patent  
15 litigation?

16 A No, I have not.

17 Q And you're not offering any opinion about how *Georgia*  
18 *Pacific* might be applied in this case, should the court need  
19 to go there, correct?

20 A I guess my opinion is that as long as whatever  
21 modifications to make *Georgia Pacific* consistent with the  
22 notion of no hold-up and no royalty stacking are applied,  
23 then that modified approach could be fine.

24 Q Well, you're -- I'm just referring to the *Georgia Pacific*  
25 case itself. You're not offering any opinion on how the

1 so-called factors of the *Georgia Pacific* case ought to be  
2 applied in this case, if they are applied?

3 A Well, I guess I have to go back and say my opinion is that  
4 the RAND commitment is a commitment to seek terms and  
5 conditions that are consistent with the principles of no  
6 hold-up and royalty stacking, the principles we saw in that  
7 ETSI document. And so, whatever you apply, if you call them  
8 *Georgia Pacific*, as long as they're consistent with those  
9 principles, that's okay.

10 Q So, is it your understanding, then, that the RAND  
11 commitment requires application of no hold-up, no royalty  
12 stacking?

13 A Yes.

14 Q Now, you're here offering an opinion about how a court  
15 should approach the problem of determining a RAND price in  
16 the event of a dispute?

17 A Yes.

18 Q And you say that your opinions relate to the principles  
19 that one should use to adjudicate a dispute over whether a  
20 particular license or proposed license is RAND?

21 A Yes.

22 Q And this is based on your academic research, not based on  
23 actual SSO experience or licensing experience, correct?

24 A This is based on my experience and research on  
25 standards-setting organizations, which I've been doing for

1 maybe the last decade.

2 Q But not participation with standards organizations or in  
3 licensing negotiations, correct?

4 A Not as a standards developer or as a participant in  
5 licensing negotiations, that's correct.

6 Q Now, you understand, sir, that the letters of assurance  
7 that you referred to were between Motorola and the IEEE on  
8 one hand, and Motorola and the ITU on the other hand?

9 A Yes. I understand that those letters were submitted to  
10 the IEEE and the ITU.

11 Q Your opinions here are not based on the views of anyone  
12 connected with the IEEE or the ITU, correct?

13 A I don't think that's quite correct. I don't -- well, I  
14 suppose I can't -- I've talked to many people who are IEEE  
15 and ITU participants, and that informs my opinion, through  
16 forums like this National Academies panel that I serve on,  
17 and conferences that I've organized on intellectual property  
18 licenses, and, again, standards-setting organizations. So  
19 all that background informs my opinions. But I'm not going  
20 to be able to pull out a quote from somebody at the ITU and  
21 offer it right now in support of my opinions.

22 Q So the answer to my question is that your opinion is not  
23 based on the views of anyone connected with the IEEE or the  
24 ITU?

25 A It's based on my experience, which includes plenty of

1 interaction with people who participate in the IEEE and the  
2 ITU.

3 Q Would you just look at your deposition, sir, in the back  
4 of the binder? Turn to page 124. Tell me when you have  
5 that.

6 A Yes.

7 Q Starting at line 7, you stated:

8 "Question: And those views, number one, they're your  
9 views personally?

10 "Answer: Yes.

11 "Question: They're informed by views of others?

12 "Answer: Yes.

13 "Question: But they're not informed, I take it, by the  
14 views of anybody connected with the IEEE or ITU?

15 "Answer: They're informed by a reading of the IEEE and  
16 ITU intellectual property policies.

17 "Question. We'll come to that. But just in terms of  
18 other persons, not informed by any other person who has  
19 written on the subject at IEEE or ITU; is that correct?

20 "Answer: I can't think of specific writings by  
21 individuals."

22 Did you give those answers to those questions?

23 A Yes, I did.

24 Q Okay. Now, you haven't offered any specific opinions  
25 about the IEEE intellectual property rights policies

1 themselves, correct?

2 A Aside from my opinions about the proper interpretation of  
3 the RAND commitment, which is contained in those policies.

4 Q And you haven't offered any specific opinions about the  
5 ITU intellectual property policy, correct?

6 A Aside from my opinions about the proper interpretation of  
7 the RAND commitment, which is part of those policies.

8 Q So your opinions about the IEEE and the ITU policies are  
9 limited to your understanding of what the RAND commitments  
10 mean?

11 A I think that's accurate.

12 Q You're not offering an opinion on how, for example, the  
13 IEEE would define RAND, or the IEEE's actual definition of  
14 RAND, are you?

15 A My understanding is that they don't provide an explicit  
16 definition of RAND inside those policies.

17 But may I go back and make one small amendment to my  
18 answer to the previous question? It's that, I do opine on  
19 the notion that standards-setting organizations desire to see  
20 their standards widely implemented, or broadly diffused, and  
21 that you can find support for that inside the language of the  
22 intellectual property policies of the IEEE and ITU.

23 Q That's your interpretation, but it's not based on anything  
24 that the IEEE or the ITU has said, correct?

25 A Oh, actually it's based on language in the policy, such as

1 the notion that the sole objective of this policy is to allow  
2 implementers to implement the standards without undue  
3 constraint.

4 Q Well, go back to my earlier question. You're not offering  
5 an opinion on how the IEEE would define RAND; is that  
6 correct?

7 A I'm offering an opinion on the proper interpretation of  
8 the RAND commitment in the event of a dispute. I don't have  
9 an opinion on the definition of RAND in the intellectual  
10 property policy.

11 Q Would you turn to your deposition, again, please, at 118?  
12 Tell me when you have that.

13 A Yes.

14 Q I'll call your attention to the following testimony.  
15 Starting with the question at line 3. The question was:

16 "According to who? According to economists, or  
17 according to the SSOs themselves?

18 "Answer: I don't think there's necessarily a conflict  
19 between the two, but I'm trying to clarify that I'm not  
20 offering an opinion on how, for instance, the IEEE would  
21 define RAND, because I think the IEEE leaves parts of RAND  
22 less defined than one might need. Yeah. I'm not offering an  
23 opinion on the IEEE's definition of RAND. I'm offering an  
24 opinion on how you should approach the problem of determining  
25 a reasonable and non-discriminatory price in the event of a



1 dispute over a RAND commitment.

2 "Question: I want to be a little bit precise about  
3 what we're talking about, how you should approach it, meaning  
4 how an economist would approach it.

5 "Answer: How a court should approach it."

6 Were you asked those questions and did you give those  
7 answers?

8 A Yes.

9 Q And when you talked about the notion of RAND being less  
10 defined than one might need, that's because you think that  
11 RAND -- that the IEEE leaves parts of RAND less defined than  
12 one might need, correct? That's what you said in that  
13 answer?

14 A That's what I said, yes.

15 Q You haven't been asked to apply the Via pool to this case,  
16 or done the work that would have allowed you to answer the  
17 question of how to apply the Via pool in this case, correct?

18 A That's correct.

19 Q In fact, you have no opinion on whether or not the Via  
20 licensing pool is an appropriate benchmark for evaluating  
21 proposed RAND terms for 802.11, correct?

22 A My opinion is that patent pools have a number of desirable  
23 features that often make them the best available comparables.  
24 But I haven't done the work that would be required for me to  
25 opine on whether the Via pool is the best available pool in

1 this case.

2 Q So you have no opinion, in answer to my question, of  
3 whether or not the Via pool is an appropriate benchmark for  
4 evaluating proposed RAND terms for 802.11?

5 A Yes, I haven't done that work.

6 Q And as for the MPEG LA pool, you can't opine on the  
7 specifics of the H.264, correct?

8 A Um, I'm not sure what you mean by "opine on the  
9 specifics."

10 Q You're not making a recommendation to the court one way or  
11 the other as to whether MPEG LA would or would not be a good  
12 benchmark for determining RAND terms for H.264, correct?

13 A For the same reasons I articulated a moment ago, yes, I  
14 believe pools are often the best available comparables, but I  
15 haven't done the work to ascertain whether this specific pool  
16 is the best available comparable in this case.

17 Q To be clear, while you've made a general statement in your  
18 direct testimony, you are not taking a position as to whether  
19 or not either of the specific pools in this case is an  
20 appropriate benchmark, because you haven't done that work?

21 A That's correct.

22 Q You haven't made a detailed factual review of Motorola's  
23 prior licenses?

24 A No, I haven't.

25 Q So you don't have an opinion as to whether Motorola's

1 licenses include hold-up, do you?

2 A I haven't done a review that would allow me to make a  
3 detailed finding as to whether Motorola's licenses include  
4 hold-up. Though there's reason to believe that licenses that  
5 are entered into long after the standard is widely adopted by  
6 the entire industry are going to have hold-up value in them,  
7 because economists just assume that a licensor who has that  
8 kind of leverage will try to exercise it.

9 Q But you haven't done the work to figure out whether or not  
10 Motorola's licenses include hold-up, and therefore you don't  
11 have any opinion about that?

12 A Yes. I have not done a detailed review of Motorola's  
13 licenses.

14 Q You were never asked to work out any particular  
15 methodology that the court could use consistent with your  
16 principles, correct?

17 A That's correct.

18 Q So you're not giving an opinion to the court on how to  
19 implement any of the particular possible ways in which one  
20 could go about determining RAND?

21 A The key thing is that however one implements, that  
22 implementation has to be consistent with these principles of  
23 a RAND commitment constraining a licensor not to capture  
24 hold-up value or charge aggregated unreasonable terms and  
25 conditions, you know, royalty stacking. And so any

1 methodology that's consistent with those principles would be  
2 fine.

3 Q So generally speaking, you're here explaining your  
4 opinions about what you think RAND should mean and how the  
5 court should apply it?

6 A I'm here articulating what I think are broadly-held  
7 consensus views of the meaning of RAND that should be applied  
8 in the event when there's a dispute over whether the terms  
9 and conditions in a prospective license, when they're subject  
10 to a RAND commitment.

11 Q But you don't know what the legal definition of RAND is,  
12 correct?

13 A Yes. I can't offer any legal opinions.

14 Q Isn't it true that you don't actually know what fair and  
15 reasonable in FRAND means?

16 A I think that there is a consensus that incorporates these  
17 ideas of no hold-up and no royalty stacking.

18 Q Well, you're here giving your opinion to the court. I'm  
19 asking you, isn't it true that you, sir, don't actually know  
20 what fair and reasonable in FRAND means?

21 A I think my opinion that the reasonable component of fair  
22 and reasonable -- so let's start with fair and reasonable.  
23 FRAND and RAND, I think we agreed when my deposition was  
24 taken, are synonyms. They mean the same thing.

25 Q Yes. They can be used interchangeably, we agreed on that.

1 A So the fair and reasonable part, my opinion is that  
2 there's a consensus among standard setters and economists who  
3 study standard setting, and others who examine standard  
4 setting, that the RAND commitment, or FRAND commitment, is  
5 meant to prevent patentholders from capturing hold-up value,  
6 or charging aggregated unreasonable terms and conditions.

7 Q Sir, I don't think you're answering my question. So let  
8 me show you a document. Could you turn in your binder to  
9 Exhibit 3125, please? Do you have that?

10 A Yes, I do.

11 Q 3125 is a paper that you prepared on or about September 2,  
12 2009, correct?

13 A This is sort of a short document that's part of a blog  
14 called talkstandards.com.

15 Q And you prepared it?

16 A Yes, I did. The first part, not all of the comments in  
17 the discussion thread.

18 MR. JENNER: Your Honor, I offer 3125.

19 MR. PRITIKIN: No objection.

20 THE COURT: 3125 is admitted.

21 (Exhibit No. 3125 was admitted into evidence.)

22 Q Would you turn, please, to the third page of 3125?

23 A Yes.

24 Q And do you see that in the middle of the page, of the  
25 fourth bullet, there's a comment that you provided to the

1 dialogue where it says, "Timothy Simcoe says:" The fourth  
2 bullet. Do you have that?

3 A Yes.

4 Q Under the fourth bullet, the fourth paragraph you began by  
5 stating, "However, no one knows what the FR in FRAND really  
6 means. I do not think that adding FR to FRAND helps to solve  
7 the hold-up problem at all. Rather, it provides grounds for  
8 ex post litigation over licensing terms when firms adopted a  
9 standard in full knowledge that the patents existed. It also  
10 invites the courts to try and come up with a definition of  
11 FR."

12 Do you see that, sir?

13 A Yes.

14 Q You wrote that at that time, didn't you?

15 A I did. And I think it's important to understand the  
16 context in which I wrote it. So, as you see in the following  
17 line it says, "My comment was meant to be provocative." So,  
18 here I was asked to comment on this EU white paper and try  
19 and stimulate a discussion among people who work on these  
20 issues. And I did that by pointing out something that I  
21 think of as a problem, which is that the RAND commitment can  
22 be abused. Firms can seek hold-up value when a standard has  
23 been widely implemented under the RAND commitment by arguing  
24 that the commitment is nothing more than a commitment to  
25 start a negotiation. And so that's consistent with what I

1 wrote.

2 Q Are you saying when you wrote the words, "However, no one  
3 knows what the FR in FRAND really means," you didn't mean  
4 that? Is that your testimony?

5 A No. I wrote these terms.

6 Q You did mean that?

7 A And so I'm saying that what I was trying to do was provoke  
8 a discussion on this.

9 Q You provoked more discussion. Would you turn to the prior  
10 page?

11 THE COURT: Prior, meaning which direction?

12 MR. JENNER: Page 2 of the exhibit.

13 Q And under the second bullet Timothy Simcoe says, in the  
14 fifth paragraph, "I would argue that the FR part of FRAND is  
15 no different from the lack of a commitment. A more cynical  
16 take is that the purpose of FR is to absolve the SSO of  
17 antitrust liability in any ex post litigation over  
18 licensing." Do you see that?

19 A Yes.

20 Q So, did you also not really mean that statement, sir? Or  
21 were you stating in this article that the FR part of FRAND is  
22 no different from a lack of commitment?

23 A I'm stating here that the FR part of FRAND is no different  
24 than the lack of a commitment in the sense that RAND can be  
25 abused by people that treat the commitment as nothing more

1 than a promise to negotiate.

2 Q Sir, would you turn to Exhibit 3118. This is a paper that  
3 you authored in November of 2007, correct?

4 A Yes.

5 Q This is not a blog, this is a published paper?

6 A Yes.

7 MR. JENNER: Your Honor, I offer 3118.

8 MR. PRITIKIN: No objection.

9 THE COURT: 3118 is admitted.

10 (Exhibit No. 3118 was admitted into evidence.)

11 Q Turn to page 6, sir. Do you have that?

12 A Yes.

13 Q And then the second full paragraph you began by stating,  
14 "In practice, the meaning of RAND and its European equivalent  
15 FRAND, fair reasonable and non-discriminatory, is unclear."

16 Do you see that?

17 A Yes.

18 Q Was that an accurate statement when you made it in this  
19 published paper?

20 A Yes, I think it was.

21 Q But you didn't testify in your direct that you thought the  
22 meaning of RAND and FRAND was unclear, did you?

23 A I think unclear here is consistent with the idea that the  
24 RAND commitment can be abused, by arguing that it's nothing  
25 more than a commitment to enter into a licensing negotiation,



1 as opposed to a commitment not to seek hold-up value.

2 Q That's what unclear means to you?

3 A Yes. Unclear means that we have disputes over which of  
4 those two options is the proper interpretation of RAND.

5 Q You've written that RAND licensing commitments are not a  
6 workable solution to SSOs intellectual property problems,  
7 haven't you?

8 A Could you show me the context in which I wrote that?

9 Q Turn to Exhibit 3114. Do you have that, sir?

10 A Yes.

11 Q And this is a piece that you wrote in June of 2007,  
12 correct?

13 A Yes.

14 Q And it says that it's a peer-reviewed journal on the  
15 internet, correct?

16 A Yes, I guess so.

17 Q What does peer review mean?

18 A So peer review typically means that you submit your  
19 article to a journal editor, who then sends it out to some  
20 other group of people to read and provide feedback. And if  
21 they provide feedback, you incorporate that into your paper,  
22 and then you resubmit it. And after a few rounds of that  
23 kind of interaction, they may accept it for publication.  
24 That wasn't at all the process here. But that's okay. It's  
25 -- it's something -- I was invited to submit this.

1 Q It was considered by professional colleagues?

2 A I don't know. I never got any feedback on it other than  
3 it got published.

4 Q All right, sir. Would you look at the fourth paragraph,  
5 the last paragraph on the page. And you began by stating,  
6 "The second half of the paper argues that RAND licensing  
7 commitments are not a workable solution to SSOs intellectual  
8 property problems." Do you see that, sir?

9 A Yes.

10 Q You believed that at the time you wrote it?

11 A Yes. I think so. It was followed by, "This problem with  
12 RAND is that it's difficult to define, let alone measure or  
13 adjudicate reasonable prices."

14 Q So you've written in your papers that RAND is unclear,  
15 that people don't know what it means, and that it's not a  
16 workable solution. But in your direct testimony you  
17 testified to the court what RAND means and how the court  
18 should apply it, correct?

19 A In my direct testimony I believe I testified that there's  
20 a broad consensus on what RAND means, not unanimity, and the  
21 lack of unanimity is where we have this potential for abuse.  
22 And I think that's something that you'll find in all of my  
23 writings.

24 Q In the context of you yourself not knowing what RAND  
25 means. You stated that in one of your articles.

1 A I guess if you say that knowing what it means requires  
2 knowing that there's a unanimous consent, or a unanimous  
3 position among everyone you could possibly ask what the  
4 proper interpretation of RAND is, I don't know, and no one  
5 does yet, because we have these disputes.

6 Q Right. We have a dispute, sir, in which the court -- I  
7 don't presume to state what it is the court will do or should  
8 do, but one view of this is that the court is looking to  
9 adjudicate the meaning of an existing contract and perhaps  
10 not what people might want to think in the future. And if  
11 we're here to adjudicate the meaning of an existing contract,  
12 you don't know what RAND means in the existing contracts  
13 between Motorola and the standards organizations, do you?

14 A I can't speak to contracts at all because that's a legal  
15 issue. But what I can speak to is this sort of consensus  
16 interpretation of RAND that exists in the community of people  
17 who study the issue.

18 Q Turn to page 4 of this article, sir. And then the fourth  
19 full paragraph you stated, "Ironically the problem with RAND  
20 is that it is not a standard. The concept of reasonable  
21 pricing has no clear meaning. Is RAND a commitment not to  
22 seek an injunction against the use of a technology? Is it a  
23 commitment to accept a certain percentage of the final goods'  
24 price, or a commitment that all patents incorporated in the  
25 product will split a certain percentage? How should a RAND

1 price be set?" Did you write that in this article, sir?

2 A Yes, I did.

3 Q And yet even having written that information in this  
4 article, you're still comfortable that you're telling the  
5 court what RAND means in your opinion?

6 A I'm very comfortable with this sentence. The point I've  
7 been trying to communicate here, I guess, is that -- is right  
8 here in this sentence that says, "In some cases it seems that  
9 IP holders make RAND pricing commitments with the belief that  
10 the commitment is so vague and ill defined that it is, in  
11 fact, vacuous." And I think that belief that one can simply  
12 treat it as a vacuous commitment is where there is some  
13 issues with RAND. And that's inconsistent with the view of  
14 the majority of people who work on this issue. But that's my  
15 view.

16 Q Would you turn to Exhibit 3010 in the front of your  
17 binder. Tell me when you have that.

18 A Yes.

19 MR. JENNER: First, Your Honor, I'm not sure if I  
20 offered 3114. If I didn't, I offer 3114.

21 MR. PRITIKIN: No objection.

22 THE COURT: There was no objection and it is being  
23 admitted.

24 (Exhibit No. 3114 was admitted into evidence.)

25 Q 3110, sir, is some comments that you made in connection

1 with comments to the Federal Trade Commission, correct?

2 A Do you mean 3010?

3 Q 3010. 3010. Yes. Would you turn to page 8? On page 8  
4 in the second full paragraph at the end of the paragraph you  
5 told the Federal Trade Commission, "It is not clear that a  
6 RAND promise places any restrictions on prospective prices or  
7 licensing terms, aside from a ban from exclusivity." You see  
8 that?

9 A Yes.

10 Q You told that to the Federal Trade Commission?

11 A Yes.

12 Q You were also asked some questions about whether or not  
13 there is any concern about antitrust activity with respect to  
14 SSOs or pools. You testified about that in your direct?

15 A Yes.

16 Q And in the first part of this paragraph you stated,  
17 "Whether because of antitrust fears or concerns that they  
18 will upset certain members, SSOs typically shy away from  
19 providing an explicit definition of RAND, leaving the matter  
20 to individual firms, and ultimately courts." Do you see  
21 that?

22 A Yes.

23 Q So in this article you acknowledge that it is possible  
24 that the SSOs do, indeed, fear possible antitrust  
25 implications of discussions amongst the members?

1 A SS0 attorneys certainly talk about antitrust issues,  
2 though my view is that the antitrust authorities have  
3 recently gone out of their way to be accommodating and  
4 encouraging towards collective licensing, ex ante disclosure  
5 of most restrictive terms and conditions, and other kinds of  
6 practices that would facilitate ex ante negotiations to  
7 prevent hold-up, and other kinds of approaches that would  
8 avoid the problem with royalty stacking.

9 Q Yes. There are recent discussions. But you also have  
10 acknowledged that for years SS0s have been afraid of the  
11 potential consequences of discussions about rates, correct?

12 A Well, I think it's hard for me to sort of impute what --  
13 whether these fears that get talked about are actually what's  
14 going on, or if it's the concerns of specific members, or  
15 exactly what they're thinking when they design the policies.  
16 But there are these conversations where they bring up  
17 antitrust concerns as a reason to avoid getting into explicit  
18 definition of RAND, as I say here.

19 Q You have stated that a RAND commitment leaves SS0  
20 participants with considerable flexibility to pursue  
21 aggressive licensing strategies, correct?

22 A Yes.

23 Q And that's in Exhibit 3118, if you would turn to that. Do  
24 you have 3118?

25 A Yes.

1 Q If you'd look at page 6. Well, I guess I've got the wrong  
2 exhibit, so I'll stand by your testimony.

3 You've also agreed that any price that avoids royalty  
4 stacking and hold-up can be consistent with RAND?

5 A Yes.

6 Q And that RAND does not require a specific royalty rate?

7 A As in a particular number?

8 Q Yes.

9 A Yes.

10 Q The SSOs contemplate many ways of getting to what they  
11 think of as RAND, correct?

12 A Yes, they do.

13 Q Neither the IEEE nor the ITU specifies that you need to  
14 use an incremental value approach to determine RAND terms,  
15 correct?

16 A That's correct.

17 Q And, in fact, patent pools don't use an incremental value  
18 approach, do they?

19 A No. Patent pools do not try to determine the incremental  
20 value of every patent in the pool, compared to alternatives  
21 that were available prior to defining the standard.

22 Q So to the extent that Professor Posner or others have  
23 suggested an incremental-value approach, one would not  
24 achieve an incremental-value approach by resorting --

25 THE COURT: Are you distinguishing between Professor

1 Posner and Judge Posner?

2 MR. JENNER: Did I say Professor Posner? My  
3 inclinations betray me. Judge Posner.

4 Q To the extent that Judge Posner suggested an incremental  
5 value approach, patent pools do not provide an incremental  
6 value approach, do they?

7 A I think Judge Posner was using the incremental-value idea  
8 as a way of getting to a working definition of what hold-up  
9 would mean, as opposed to proposing a methodology for valuing  
10 any set of patents. But patent pools, as you said, don't go  
11 through the exercise of taking each patent and trying to  
12 determine what were the alternatives available at the time  
13 the standard was defined.

14 Q Right.

15 A Working out the design around costs, and then taking  
16 each -- somehow aggregating that up into a price. There's  
17 thousands of patents in the pool, that would be difficult.

18 THE COURT: Mr. Jenner, until the Xbox version of  
19 federal court comes out, I'm not sure I can compete with  
20 Judge Posner. But we're going to take our morning break at  
21 this time.

22 MR. HARRIGAN: Your Honor, I have one item, if I may,  
23 which is to correct my abject failure to mention all the  
24 Microsoft lawyers who are present at today's hearing. They  
25 also include my partners Mr. Wion and Mr. Cramer who are back



1 there, and Mr. Nathaniel Love from Sidley, and David Killough  
2 and David Howard from Microsoft.

3 THE COURT: Thank you.

4 MR. JENNER: Your Honor, before we break can I  
5 complete this segment by offering Exhibit 3010?

6 THE COURT: Any objection?

7 MR. PRITIKIN: No objection.

8 THE COURT: 3010 is admitted.

9 (Exhibit No. 3010 was admitted into evidence.)

10 (Court recessed.)

11

12 THE COURT: Please continue, Mr. Jenner.

13 MR. JENNER: Thank you, your Honor.

14 By Mr. Jenner:

15 Q Sir, you have agreed that it is left entirely to the  
16 parties to determine the terms of a standards-essential  
17 license by whatever methodology they deem appropriate,  
18 correct?

19 A Subject to the caveat that there is a RAND commitment,  
20 which I believe is a commitment which is enforceable. In the  
21 event that there is a dispute over the commitment, there has  
22 to be some enforcement mechanism. But, yes, RAND licenses  
23 can be negotiated between parties.

24 Q In a variety of ways?

25 A Yes.

1 Q And one of those is private bilateral negotiations?

2 A Yes.

3 Q As far as stacking is concerned, you have acknowledged  
4 that you don't have any evidence that royalty stacking was an  
5 actual problem for a company seeking licenses for any  
6 essential patents, correct?

7 A As I recall, my evidence of royalty stacking is largely  
8 the existence of patent pools which offer a solution to the  
9 royalty stacking problem. And the comments of companies like  
10 Motorola in their ETSI submission, where they say, we need to  
11 articulate a principle of aggregated reasonable terms and  
12 conditions to avoid the royalty stacking problem. But I  
13 haven't looked at the total cumulative royalty burden in any  
14 particular industry to establish this, because the licenses  
15 are secret, and so it is hard to know what the size of the  
16 stack would be.

17 Q So you don't have any example of an industry in which  
18 there is actual evidence that royalty stacking has been a  
19 problem, right?

20 A The best example I have is the evidence in this paper by  
21 Lemley and Shapiro on royalty stacking. I haven't looked at  
22 any particular industry to figure out what the size of the  
23 stack would be, that's correct.

24 Q As far as hold-up is concerned, you have no evidence that  
25 there is any hold-up in any of Motorola's prior licenses,

1 correct?

2 A Yes, I haven't done the work that would let me figure that  
3 out.

4 Q In fact, you stated that you have no evidence that the  
5 dispute between Motorola and Microsoft in this case is in  
6 fact based on hold-up; isn't that right?

7 A Yes.

8 Q And you can't nail down any particular license from any  
9 company as an example of hold-up, correct?

10 A Yes, I haven't attempted to do that.

11 Q You agree, would you, that the IEEE has expressly  
12 prohibited its members from discussing in IEEE meetings  
13 anything having to do with specific license terms?

14 A Yes, inside the meetings. Although they are allowed to  
15 make a commitment to the most restrictive terms and  
16 conditions to a license using the voluntary ex ante  
17 disclosure policy that the IEEE has in place.

18 Q Right, individually, but not by virtue of an IEEE meeting?

19 A No, they are not allowed to discuss prospective licensing  
20 terms in the meetings. It is typically engineers in the  
21 meetings who wouldn't be discussing that in any case.

22 Q And you noted that in your expert report, right, that  
23 explicit multilateral ex ante negotiations cannot be  
24 conducted under the auspices of many traditional SSOs like  
25 the IEEE and the ITU, correct?

1 A Correct.

2 Q And you have written that it is a possibility that  
3 standard-setting organizations remain generally fearful of  
4 the antitrust implications of moving to an ex ante policy,  
5 correct?

6 A That's correct.

7 Q You think that antitrust concerns historically have caused  
8 SSOs to be scared of engaging in ex ante multilateral  
9 discussions, correct?

10 A Yes, I guess that's correct.

11 Q Now, you were shown the ETSI proposal by Motorola and some  
12 other folks in your direct testimony?

13 A Yes.

14 Q And if you have it, that is Exhibit 1031 in the white  
15 binder that you used on your direct testimony.

16 A Yes.

17 Q Turn to the page with what we now finally call "the lawyer  
18 numbers," 0999 in the lower right-hand corner. It is about  
19 the third or fourth page in. It has Section 6 in the middle  
20 of the paper. Do you have that?

21 A Yes.

22 Q Now, first, let's be very clear about a couple of things.  
23 This was a proposal made to ETSI?

24 A Yes.

25 Q Which is not the IEEE and it is not the ITU, correct?

1 A That's correct.

2 Q This proposal, first of all, has nothing to do with 802.11  
3 or H.264, correct?

4 A It has to do with clarifying the FRAND concept, which is  
5 commonly held to mean the same thing across the  
6 standard-setting organizations.

7 Q But it was made to ETSI, and it had nothing to do with  
8 802.11 or H.264, correct?

9 A It was made to ETSI, who doesn't develop either of those  
10 standards, yes.

11 Q Now, if you look down under 6.1, "Clarification of FRAND"  
12 is the proposal? Clarification?

13 A Yes.

14 Q So that presumes, in common parlance, that something needs  
15 to be clarified?

16 A It does.

17 Q It says, "It is proposed to revise the ETSI IPR policy."  
18 Do you see that?

19 A Yes.

20 Q That presumes that something needs to be revised, in  
21 common parlance?

22 A Yes.

23 Q And it goes on to use the words "to clarify the meaning of  
24 FRAND," correct?

25 A Correct.

1 Q So somebody thought the meaning of FRAND needed  
2 clarification, correct?

3 A Yes.

4 Q And in Item 1, "aggravated reasonable terms," the first  
5 thing it says there, again, is to clarify what the FRAND  
6 obligation means, correct?

7 A Yes.

8 Q So clearly somebody thought that clarification and  
9 revision was needed, because that's what was proposed?

10 A Yes, Motorola thought that these clarifications would be a  
11 good idea.

12 Q Even some other people thought that.

13 A Yes.

14 Q And at the end of the day, the organization rejected this,  
15 correct?

16 A ETSI didn't adopt these clarifications formally in its IPR  
17 policy.

18 Q So they were rejected?

19 A I don't know, because I don't know if they came to a vote.  
20 But, yes -- I mean, in the sense was this language adopted  
21 in the ETSI IPR policy? No, it was not.

22 Q It was not. And so despite anybody's suggestions, these  
23 ideas never became part of any policy, correct?

24 A That's correct.

25 Q You talked a little bit about pools. You have agreed that

1 when there are fewer essential patentholders that have joined  
2 a pool, it is less relevant as a benchmark, haven't you?

3 A All else equal, I think pools that have a large fraction  
4 of the potential licensees and licensors in them are likely  
5 to provide a better comparable benchmark.

6 Q So that a pool like Via that has very few essential  
7 patentholders is more likely to be a less meaningful  
8 benchmark?

9 A I haven't done the work that would let me assess the  
10 quality of Via as a benchmark.

11 Q And you can't assess the quality of MPEG LA as a benchmark  
12 either, for the same reason?

13 A Yes.

14 Q But you have agreed that it is possible that a price above  
15 a pool price is consistent with RAND terms and conditions,  
16 haven't you?

17 A My position is that RAND terms and conditions mean that  
18 the price can't incorporate hold-up value or incorporate the  
19 costs of switching that accumulate through industry-wide  
20 adoption of the technology, and can't be aggregate  
21 unreasonable, which is the clarification that we were just  
22 looking at in the ETSI policy -- or the proposed policy. To  
23 the extent that whatever price you are telling me above the  
24 pool, below the pool is consistent with those principles,  
25 that's fine.

1 Q So the answer to my question --

2 A The reason pools provide an attractive benchmark is that  
3 they face the same problem that the standard-setting  
4 organization does, in terms of balancing the interests of the  
5 licensees and licensors.

6 Q I don't want to interrupt you, sir. I am desperate to get  
7 an answer to my question. You would agree and have agreed  
8 that a price higher than a pool rate could be RAND, yes or  
9 no, sir?

10 A Yes, the number could be higher than the number charged by  
11 a pool. As long as it is consistent with no royalty stacking  
12 and no hold-up, it would be RAND.

13 Q Your testimony really is about no royalty stacking and  
14 hold-up? That's essentially what you are here to tell the  
15 court?

16 A I think my testimony, to go all the way back to what were  
17 my opinions, has to do with the objectives of the SSOs, in  
18 terms of promoting the diffusion of the standard, the use of  
19 the RAND commitment in particular in the context of the IPR  
20 policy in promoting diffusion, the interpretation of the RAND  
21 standard as no hold-up and no stacking, and the fact that  
22 pools are often the best available comparables when we have  
23 this problem of valuing the terms and conditions of a RAND  
24 license in the event of a dispute.

25 Q Pools are often the best comparables, you say. Pools do



1 patent counting, we have already established that. But you  
2 haven't done enough work to determine what the overall  
3 reliability of patent counting is, have you?

4 A I'm not sure what you mean.

5 Q You have not done enough work to determine what the  
6 overall reliability of patent counting is, have you?

7 A Yes, I guess that's right.

8 Q And you don't know of any situation in the real world  
9 outside of patent pool organizations where actual licensing  
10 has utilized patent counting, do you?

11 A I know of papers that talk about cross-licensing  
12 negotiations, where the size of the stack matters. But I  
13 haven't observed this personally. My view is that pools use  
14 patent counting as a pragmatic solution to a valuation  
15 problem. Outside of pools, I don't have any opinion about  
16 patent counting.

17 Q The answer to my question is, indeed, you don't know of  
18 any situation in the real world, outside of patent pool  
19 organizations, where actual licensing has utilized patent  
20 counting, do you?

21 A No.

22 Q Now, you broadly agree that standard-setting organizations  
23 don't make any determination about the reasonableness of a  
24 license, correct?

25 A That's correct.

1 Q But you have recognized that standard-setting  
2 organizations go so far as to presume that if a license is  
3 granted, it is reasonable; isn't that true?

4 A No.

5 Q It is not?

6 A Standard-setting organizations stay out of determination  
7 of whether a license is reasonable or not.

8 Q Would you turn, sir, to Exhibit 3116 in your binder? Do  
9 you have that?

10 A Yes.

11 Q This is another paper that you wrote in 2005, correct?

12 A Yes, this was subsequently published as a book chapter.

13 Q As a book chapter. Would you turn to Page 30? Tell me  
14 when you are there.

15 A Yes.

16 Q And if you will follow with me, starting in the middle of  
17 the -- the top line on the page. You stated in your paper,  
18 which later became a book chapter, quote, "The most popular  
19 by far is the RAND or reasonable and nondiscriminatory  
20 licensing requirement. In practice this requirement is  
21 fairly vague. While it is clear that a RAND rule implies  
22 that IPR holders cannot refuse to grant a license, it leaves  
23 them with fairly wide latitude to set prices that can even  
24 vary by licensee. Moreover, most SSOs do not actually make  
25 any determination about the reasonableness of a license, but

1     rather presume that this criteria has been met as long as a  
2     license has been granted." Did you write that, sir, in your  
3     article which later became a book chapter?

4     A    Yes, I did.

5                 MR. JENNER: Thank you. No further questions.

6                 MR. PRITIKIN: Just a couple of questions, your  
7     Honor.

8                 MR. JENNER: Your Honor, I constantly am reminded  
9     about my failings to offer exhibits. I would offer  
10    Exhibit 3116.

11                THE COURT: Any objection?

12                MR. PRITIKIN: No.

13                THE COURT: 3116 is admitted.

14                (3116 admitted.)

15                                 REDIRECT EXAMINATION

16    BY MR. PRITIKIN:

17    Q    Professor Simcoe, could you go back to Exhibit 1031?

18    A    Yes.

19    Q    And would you turn over to Page 3 of the document? I want  
20    to direct your attention to the second sentence in the first  
21    paragraph. These proposed changes are really in the nature  
22    of clarification of existing FRAND rules and commonly  
23    understood goals. Do you believe that the approach that was  
24    being urged by Motorola here in this document reflected  
25    commonly held views of RAND?

1 A Yes, I do.

2 Q And let's look down to the bottom of the page. And I want  
3 to direct your attention to the last paragraph, the last two  
4 sentences, where Motorola said that one of their objectives  
5 here was to "signal to judges in patent litigation that they  
6 can and should look at the overall cumulative royalty costs  
7 for a given standard, and not just assess whether the terms  
8 being offered by one particular licensor are fair and  
9 reasonable in vacuo." Do you agree with that approach?

10 A Yes.

11 MR. PRITIKIN: Nothing further.

12 RE CROSS-EXAMINATION

13 BY MR. JENNER:

14 Q As long as we are on that article, sir, would you just  
15 look at the two sections that counsel pointed out to you,  
16 where there was a proposed signal to judges as to what they  
17 might want to think. Will you again confirm for me, sir,  
18 that that signal was not adopted by ETSI? It did not send  
19 the signal, did it?

20 A ETSI did not incorporate this language into their IPR  
21 policy.

22 Q And, therefore, didn't send the signal, did it?

23 A The signal wasn't the adopting of the language. The  
24 signal here, I believe, was meant to be the idea that --  
25 Hold on a second. Let me look at it.

1 Q I think this is clear.

2 A You're right.

3 THE COURT: I think he is still answering your  
4 question.

5 THE WITNESS: Yes, this language did not make its way  
6 into the ETSI policy.

7 By Mr. Jenner:

8 Q Did not. And the other thing I would ask you to take a  
9 look at is, under the section where the 6.1 clarification  
10 appears, mid-page -- Do you see that?

11 A Yes.

12 Q The second paragraph begins with a sentence that I did not  
13 ask you about. It says, "The two proposed changes would  
14 introduce the principles of aggregated reasonable terms and  
15 proportionality into the FRAND definition." Do you see that?

16 A Yes.

17 Q And would you agree with me that if they are to be  
18 introduced, they are logically not already there?

19 A I believe that the proposal spells out the idea that --  
20 their clarification of commonly understood goals.

21 MR. JENNER: Okay. That's fine. No further  
22 questions, your Honor.

23 THE COURT: Thank you.

24 MR. PRITIKIN: Nothing further.

25 THE COURT: You may step down, sir. Thank you.

1 Microsoft will call its next witness.

2 MR. PRITIKIN: Microsoft's next witness, your Honor,  
3 is Dr. Matthew Lynde.

4 Whereupon,

5 MATTHEW LYNDE

6 called as a witness, having been first duly sworn, was  
7 examined and testified as follows:

8 THE CLERK: Will you please state your full name and  
9 spell your last name?

10 THE WITNESS: My name is Matthew Lynde. The last  
11 name is spelled L-Y-N-D-E.

12 DIRECT EXAMINATION

13 BY MR. PRITIKIN:

14 Q Dr. Lynde, could you turn to Exhibit 54 in your binder?  
15 Is this a copy of your CV?

16 A Yes, it is.

17 MR. PRITIKIN: Microsoft moves the admission of 54.

18 MR. BATCHELDER: James Batchelder. No objection.

19 THE COURT: The exhibit is admitted.

20 (54 admitted.)

21 By Mr. Pritikin:

22 Q Could you describe your educational background?

23 A I have a Ph.D. in economics from the University of  
24 California at Berkeley. I also have an undergraduate degree  
25 in economics from the same institution, although as an

1     undergraduate I studied a great deal of electrical  
2     engineering and French.

3     Q     Where do you currently work?

4     A     I work at Cornerstone Research.

5     Q     And can you explain what that company is?

6     A     Cornerstone Research is an economic consulting firm with  
7     six offices across the nation, and we specialize, mostly as  
8     ex-professors, in studying economic issues in regulatory and  
9     dispute arenas, usually having to do with antitrust and  
10    securities laws. My particular specialty is intellectual  
11    property disputes.

12    Q     Are you one of those ex-professors?

13    A     I am afraid I am.

14    Q     Before joining Cornerstone, where did you work?

15    A     I was a partner at PricewaterhouseCoopers. Prior to that  
16    -- prior to the merger at Pricewaterhouse, both in New York  
17    and later in San Francisco, where I headed up  
18    Pricewaterhouse's intellectual property practice.

19    Q     Have you been accepted as an expert and testified in court  
20    as an expert on IP valuation and patent damages issues?

21    A     Yes, I have.

22    Q     In your consulting work, what experience have you had in  
23    IP licensing?

24    A     In my consulting work, both at Pricewaterhouse and at  
25    Cornerstone Research, I have consulted with clients who are

1 interested in assessing the value of their IP portfolios,  
2 particularly patents. And they want some guidelines, from an  
3 economist anyway, about thoughts in terms of approaches to  
4 value.

5 Q Are you a member of any advisory boards relating to  
6 intellectual property?

7 A I have been a sponsor on the advisory board for the  
8 Berkeley Center for Law and Technology in the past. I am  
9 currently on the advisory board for the LST Group at Stanford  
10 Law, and the original sponsor of the Intellectual Property  
11 Litigation Clearinghouse.

12 Q Have you prepared a demonstrative exhibit summarizing the  
13 conclusions that you have reached in this matter?

14 A Yes, I have.

15 Q Could we put up Exhibit 4073? Can you explain to us what  
16 conclusions you have reached regarding a RAND royalty for  
17 Microsoft's H.264 standard-essential patents?

18 A Yes. With respect to the H.264 standard, my conclusion  
19 from the evidence I have reviewed is the current RAND royalty  
20 indicated by the objective evidence is approximately  
21 two-tenths of a cent per unit that Microsoft would sell.

22 Q What is that based on?

23 A That is based on the best available comparable, the  
24 objective evidence provided by the actual negotiated terms  
25 and conditions of the MPEG LA patent pool that is



1 specifically addressing the H.264 standard and nothing else.  
2 And that is its basis.

3 Q And what conclusions have you reached regarding a RAND  
4 royalty for Motorola's 802.11 standard-essential patents?

5 A With respect to the 802.11, otherwise known as the WiFi  
6 standard, set by the IEEE, the best evidence I have reviewed  
7 in this case would indicate that the current RAND royalty of  
8 approximately 5 to 6¢, no higher than 5 to 6¢, per unit of  
9 Microsoft sales payable to Motorola.

10 And the basis of that opinion, once again, is principally  
11 on the best available evidence from a pool arrangement, in  
12 this case the only pool I am aware of that has achieved some  
13 level of success, and that is the Via Licensing pool for  
14 802.11.

15 But given the relatively limited participation in that  
16 pool, I look to other corroborative evidence, including chip  
17 prices and royalties on chips that would implement an 802.11  
18 functionality.

19 Q Why have you denominated the royalty in a cents per unit  
20 form rather than a percentage royalty?

21 A Well, principally because the evidence available to the  
22 economist is the actually negotiating parties who are making  
23 pool arrangements, have determined uniformly, as far as I  
24 know with respect to consumer electronics products, certainly  
25 in these two pools, and many others that I am aware of, that

1 in that situation a cents per unit form of royalty is the  
2 most appropriate royalty form.

3 Q And what would be the problem with a percentage royalty?

4 A Well, as Professor Simcoe indicated, the problem with  
5 licensing on a percentage basis raises the risk that you have  
6 the participation of the patentholder and payment of  
7 royalties on subject matter which is completely divorced and  
8 separate and apart from the patent subject matter, number  
9 one, let alone the standard. And so that is the problem and  
10 danger, especially with consumer electronics, multicomponent  
11 sorts of end products.

12 And this is particularly exacerbated by Motorola's policy  
13 of licensing downstream, as close to the consumer as possible  
14 with the highest possible price. That makes the hold-up  
15 problem all the worse.

16 Q Now, let's focus on how you applied your approach in the  
17 H.264 context. Have you prepared a summary of the Motorola  
18 patents that you understood that at least Motorola claimed  
19 were essential to H.264?

20 A Yes, I have.

21 Q And would you turn to Exhibit 1151? Is this a list of the  
22 patents, at least that Motorola said were essential?

23 A Yes, that was the intent of this list. I believe I got  
24 this from Motorola's own submissions in this case.

25 MR. PRITIKIN: Microsoft moves the admission of

1 Exhibit 1161.

2 MR. BATCHELDER: No objection.

3 THE COURT: It is admitted.

4 (1161 admitted.)

5 By Mr. Pritikin:

6 Q How many worldwide patents are listed?

7 A Sixty-three worldwide patents were disclosed as  
8 potentially essential by Motorola.

9 Q And how many U.S. patents have they said they have that  
10 are essential?

11 A Sixteen.

12 Q And are these the numbers that you used in your analysis?

13 A They are indeed.

14 Q Does Microsoft also have patents it claims are essential  
15 to H.264?

16 A Yes, it does, indeed. As we heard, Dr. Sullivan actually  
17 chaired the group that came up with the standard, eventually.

18 Q Would you turn to Exhibit 1150? Is this a list that you  
19 prepared of the Microsoft H.264 essential patents?

20 A It is indeed. On a worldwide basis Microsoft has almost  
21 three times as many patents as Motorola in this area, 172  
22 patents.

23 Q And how many U.S. patents?

24 A It has 40 U.S. patents.

25 Q And has someone determined that these are essential to the

1 H.264 standard?

2 A In the case of Microsoft, yes, because once you submit  
3 your patents to a pool, and Microsoft does participate in the  
4 pool, there is an independent assessment made of the  
5 essentiality of those patents.

6 Q Now, how do the relative patents of Microsoft and Motorola  
7 figure into your analysis?

8 A Well, I simply observe that both parties have portfolios  
9 in this area, and that they are sizable portfolios. And that  
10 considering that there -- many parties have patents that may  
11 or are deemed essential in this area, there is an economic  
12 problem of coordination, how all of that would be  
13 coordinated, so the world consumers can benefit from an  
14 agreed-upon standard.

15 Q Now, you said that you considered the MPEG LA H.264 pool  
16 as the best comparable. Have you prepared a demonstrative  
17 exhibit explaining why?

18 A Yes, I have.

19 Q Let's take a look at Exhibit 4074, that demonstrative.

20 A Yes, it is.

21 Q Using the demonstrative, can you explain to us or give us  
22 an overview of why you think the MPEG LA H.264 pool is the  
23 best benchmark?

24 A Yes. Of the evidence I have reviewed, and in conjunction  
25 with a broad consensus amongst economists who have studied

1 this issue, and we have heard two very significant, prominent  
2 economists this week on the problem of hold-up and stacking  
3 and standards organizations, the benchmark of a pool  
4 fundamentally is the right approach, because it is something  
5 that approximates an ex ante multilateral negotiation. And  
6 that is the kind of free negotiation of parties which would  
7 result, if we observe it, in a royalty which fully addresses  
8 the issue of stacking and hold-up.

9 So, in particular, when we look at the evidence in this  
10 case, the MPEG LA H.264 pool is specifically tied to the  
11 standard in question. That is its only purpose. It is  
12 exactly the right technology.

13 And it was established just after the ITU came up with the  
14 standard. And the industry is essentially waiting to see if  
15 reasonable terms would be offered by the pool. And  
16 relatively quickly they were. And this was before the  
17 widespread adoption of H.264.

18 It has been a very successful pool. There are 26  
19 licensors, major licensors, large blue chip companies with  
20 significant portfolios, over 2,400 patents, as we have heard,  
21 on a worldwide basis, and now over 1100 licensees. So both  
22 on the licensor and licensee side, and given the widespread  
23 adoption of the standard that almost all of us around the  
24 world are benefiting from now, this is a very successful  
25 pool.

1           So for all these reasons, this was the best available  
2       objective evidence of the right comparable in order to answer  
3       the question of what would be something consistent with a  
4       RAND commitment.

5           THE COURT: Mr. Pritikin, before you begin, we are  
6       going to have other people look at this transcript. You have  
7       used this phrase "ex ante," and other people used the phrase  
8       "ex post." Would you define those so we have a common  
9       definition?

10          THE WITNESS: Yes, sir. Without being a Latin  
11       scholar, what economists mean by it is, ex ante is before  
12       something and ex post is after something. The criteria  
13       economists are concerned with is either before or after the  
14       effective adoption of the standard. Because before the  
15       standard --

16          THE COURT: I don't need an explanation. I just need  
17       a definition.

18          THE WITNESS: Yes, sir.

19       By Mr. Pritikin:

20       Q   Now, do you limit the term "ex ante" to before the date  
21       the standard is adopted, or do you use it in connection with  
22       the widespread implementation of the standard?

23       A   As far as economists are concerned, there is a gradual  
24       transition there. But effectively, in terms of economics, it  
25       is before widespread adoption, so the implementers have not

1 yet sunk costs that they can't recover should there be any  
2 change in the standard.

3 MR. PRITIKIN: Your Honor, I neglected to move the  
4 admission of Exhibit 1150, and would do so now.

5 MR. BATCHELDER: No objection.

6 THE COURT: It is admitted.

7 (1150 admitted.)

8 By Mr. Pritikin:

9 Q Would you turn to Exhibit 1152? Is this a summary that  
10 you prepared of the patentholders and the unexpired patents  
11 in the H.264 MPEG LA pool?

12 A Yes, it is.

13 MR. PRITIKIN: Microsoft moves the admission of 1152.

14 MR. BATCHELDER: No objection.

15 THE COURT: 1152 is admitted.

16 (1152 admitted.)

17 By Mr. Pritikin:

18 Q Dr. Lynde, are you aware that Motorola's experts in this  
19 case have claimed that the MPEG LA pool is not a good  
20 comparable, because it supposedly does not include licensors  
21 that generate a return on their R&D investments through  
22 licensing rather than through product sales?

23 A Yes, I am aware of that.

24 Q Now, are there in fact licensors in the H.264 pool that  
25 you understand derive most or all of their relevant revenue

1 from licensing, as opposed to making and selling products?

2 A Yes, there are, of course.

3 Q Let me ask you about a few of them on the list that is in  
4 Exhibit 1152. Dolby Laboratories, what is your understanding  
5 of what Dolby Laboratories does?

6 A Well, Dolby Lab's -- License Corporation anyway, gets all  
7 of its revenue, as far as I understand, from royalties from  
8 licensing its intellectual property.

9 Q And what about the Electronics and Telecommunications  
10 Institute on Page 2?

11 A Once again, ETRI, to the best of my knowledge, receives  
12 substantially all of its income from licensing its  
13 intellectual property.

14 Q Another on Page 2 is the Fraunhofer-Gesellschaft. Is  
15 another name for that the Heinrich Hertz Institut that  
16 Dr. Sullivan mentioned?

17 A That is my understanding. Actually, the HHR, as we  
18 English speakers say, or the Fraunhofer-Gesellschaft, is a  
19 major licensor of intellectual property. And we also heard  
20 from Dr. Sullivan it is a major contributor to the standard.  
21 And to the best of my knowledge, it receives substantially  
22 all of its income from licensing intellectual property.

23 Q If you look at Page 62, another of the members of the  
24 MPEG LA pool is something called the Trustees of Columbia  
25 University. Do they make and sell products?



1 A I think they are in the education business. But they also  
2 have research professors that provide intellectual property,  
3 the university trustees, like many university trustees of  
4 universities receive income from royalties.

5 Q Does the MPEG LA pool include licensors that derive their  
6 revenue from the licensing of their patents?

7 A To the best of my knowledge, certainly.

8 Q Motorola's experts also claim that pool rates are set low  
9 in order to encourage the adoption of the standard rather  
10 than to compensate patentholders for their intellectual  
11 property. Do you agree with that criticism?

12 A No, I completely disagree with that.

13 Q Why not?

14 A Because a successful pool that economists would envisage  
15 to happen to address both the stacking and the hold-up  
16 problem consists both of licensors and licensees. So it has  
17 a balance of all interested parties. And they come to a  
18 collective licensing agreement, balancing the needs of  
19 providing adequate compensation to all of the contributors of  
20 intellectual property, not just one or a few, but all, and at  
21 the same time providing a total royalty burden at the end of  
22 the process for producers of products that is commercially  
23 feasible, that provides consumers with a sustainable value,  
24 and products for them to enjoy the benefits of the standard.  
25 So that balance is exactly what economists are looking for

1 for the proper benchmark.

2 Q For a large pool like MPEG LA, do the rates need to be set  
3 high enough to attract licensors?

4 A Certainly. There has to be the attraction of a high  
5 enough price to attract licensors. It should be borne in  
6 mind, of course, that if there is no standard, there is no  
7 revenue. So, once again, the interests of the licensor is to  
8 balance with other licensors, and to balance the objective of  
9 having a widely-adopted standard so that all licensors can  
10 benefit from revenues.

11 Q Now, Motorola's experts also claim that because pools  
12 frequently divide royalties based on patent numbers, they  
13 attract only firms with low-value patents. What is your  
14 response to that?

15 A My response is that is simply not what we observe, even if  
16 it might be theoretically possible. What we observe in these  
17 pools, especially with regard to interoperability standards,  
18 as was pointed out by both previous economists, the question  
19 isn't so much a matter of having a standard that is  
20 innovation driven as it is having a standard where everybody  
21 agrees that the language all of the equipment is using talks  
22 with each other. Everybody has to agree on that. That is  
23 the point of the standard.

24 And we observe that major corporations, such as Microsoft,  
25 and Ericsson, and LG, and many of the major corporations are

1 participating, for example, in the H.264 pool.

2 Q Let me ask you about some of the members of the MPEG LA  
3 pool. I am going to ask you whether you regard them as  
4 leading technology firms. Apple?

5 A Absolutely. Perhaps the leading technology firm.

6 Q Well, I'm not sure my client would agree. But is Apple a  
7 member of the MPEG LA pool?

8 A It is.

9 Q And is Cisco a member of that pool?

10 A It is.

11 Q Fujitsu?

12 A Yes.

13 Q You mentioned LG. What about Sony? Is Sony a member of  
14 the pool?

15 A It is. And, of course, it is a very major electronics  
16 company.

17 Q Ericsson?

18 A Yes.

19 Q Toshiba?

20 A Yes.

21 Q Were you here when Mr. Glanz testified about Motorola's  
22 participation in the formation of the MPEG LA H.264 pool?

23 A Yes, I was.

24 Q And what bearing does Motorola's participation in the  
25 formation of that pool have on your opinion on the use of it

1 as a benchmark?

2 A Well, I think it further corroborates the usefulness of  
3 this benchmark. Because, as we heard from Mr. Glanz,  
4 Motorola was very heavily involved in the whole process, all  
5 the way up to the last press release involved in not  
6 proposing higher rates, but potentially lower rates, as  
7 licenses, and also never proposed that their particular  
8 patents were more valuable than average, more valuable than  
9 others'.

10 Q Has Motorola participated in other MPEG LA pools relating  
11 to video compression?

12 A Indeed it has.

13 Q Which one?

14 A It also participated in negotiations for and eventually  
15 joined the MPEG-4 visual pool.

16 Q And can you tell us at a high level what that technology  
17 related to?

18 A It is very similar to codec technology for compression of  
19 video signals. It was actually a competing standard that had  
20 been proposed.

21 Q And what conclusions do you draw from the fact that  
22 Motorola participated in a pool around that video compression  
23 standard?

24 A The terms that were eventually agreed on by that pool were  
25 very similar to the MPEG LA H.264 pool, in terms of structure

1 and in terms of rate, in terms of caps. So it seems to me  
2 that from that participation, in joining the pool, Motorola  
3 clearly indicates that they see that as a reasonable and  
4 viable business model.

5 Q And in fact, is one of the patents that Motorola in this  
6 case says is essential to H.264 also said to be essential to  
7 that standard and included in that pool?

8 A Yes, there is one overlap patent.

9 Q Is that the '980 patent?

10 A I believe that's correct.

11 Q Now, could you turn to Exhibit 71 in your binder? Can you  
12 tell us what this document is?

13 A Yes. This is an internal Motorola document. It appears  
14 to be a document by Motorola Stamp Group, which specializes  
15 in licensing, as far as I understand.

16 Q And what does this relate to?

17 A This in particular relates to their evaluation, their  
18 participation, in the pool we were just talking about, the  
19 MPEG-4 visual pool.

20 Q And if you look at the first page of it, there is a  
21 statement made that signing the license or joining the pool  
22 provides a simple business solution for most of the patent  
23 issues at reasonable rates. Do you see that?

24 A Yes, I do. And that is exactly what an economist would  
25 expect. There are tremendous efficiencies of using a pool

1 arrangement in terms of avoiding negotiating costs,  
2 transaction costs in joining the pool.

3 Q So does the Motorola document identify the rates of that  
4 pool as reasonable?

5 A It does indeed.

6 Q How do those rates compare to the rates of the MPEG LA  
7 H.264 pool?

8 A They are very similar. They are about 25¢ a unit for  
9 rights to the entire pool, not one licensor, compared to 10,  
10 20¢ for the -- 0 to 10 to 20¢ for the MPEG LA pool.

11 Q The 25¢ is not what one company would get, that's what  
12 everybody would get and divide up; is that correct?

13 A That would be what everybody that contributes to the pool  
14 would divide up.

15 Q Now, is Google --

16 MR. PRITIKIN: Your Honor, I will move the admission  
17 of Exhibit 71.

18 MR. BATCHELDER: No objection.

19 THE COURT: 71 is admitted.

20 (71 admitted.)

21 By Mr. Pritikin:

22 Q Is Google, Motorola's parent company, a licensee of the  
23 MPEG LA H.264 pool?

24 A Yes, that's my understanding.

25 Q Would you turn to Exhibit 103, please? And is this

1 Google's license agreement with the MPEG LA H.264 pool?

2 A Yes, it is. It is called the AVC patent portfolio  
3 license. AVC, it is my understanding, being another name for  
4 the H.264 standard.

5 Q Is the MPEG LA pool sometimes called the H.264 pool and  
6 sometimes called the AVC pool?

7 A Yes, it is. That is my understanding.

8 Q The same thing?

9 A That is my understanding, yes.

10 MR. PRITIKIN: Microsoft moves the admission of 103.

11 MR. BATCHELDER: No objection.

12 THE COURT: It is admitted.

13 (103 admitted.)

14 By Mr. Pritikin:

15 Q Now, do you consider this Google agreement with the pool  
16 to be a relevant comparable for purposes of the valuation  
17 exercise in this case?

18 A Yes, certainly this is an example of a large and  
19 sophisticated technology company which has taken a license  
20 from the MPEG LA pool arrangement on standard terms and  
21 conditions as proposed by the pool.

22 Q Do you believe that this corroborates your selection of  
23 the pool as a comparable?

24 A Yes, I do, indeed.

25 Q What, if any, commitments to MPEG LA licensees, like

1 Google, do they make with respect to their own H.264  
2 essential patents?

3 A Well, my economist understanding anyway is that the  
4 standard agreements involve the requirement of a grant back  
5 of rights from the licensee for patents that are in the exact  
6 same standards area, which seems reasonable.

7 Q And does the commitment extend to the affiliates of the  
8 licensee?

9 A That is my understanding. It is also my understanding  
10 that that would presumably include affiliates such as  
11 Motorola Mobility, which has been purchased by Google.

12 Q Would you turn to Section 8.3 of the agreement at pages 26  
13 to 27? And is this the provision you are referring to?

14 A Yes, that is what I was thinking of in Section 8.3 here.  
15 And the language says what it says. That was my  
16 understanding. First of all, there is a presumption that the  
17 terms and conditions are fair and reasonable, that is a fair  
18 and reasonable royalty, and that there is grant back by the  
19 licensee.

20 Q Now, I want to pause on that for just a moment, Dr. Lynde,  
21 and make sure we understand what this says. The patents that  
22 are being licensed back are the patents of Google and its  
23 affiliates, like Motorola; is that correct?

24 A That is my understanding.

25 Q And Google is saying in this document that the pool rates



1 are presumed to be a fair and reasonable royalty rate?

2 A That is my understanding from this agreement signed by  
3 Google.

4 Q And what does that tell you about whether the pool royalty  
5 rates in this case are a good comparable for the Motorola  
6 H.264 patents?

7 A Well, I think that provides further corroboration that  
8 this is an appropriate benchmark for a RAND-compliant rate.

9 Q Was this an arm's length transaction between Google and  
10 the pool?

11 A Certainly. The pool is independent.

12 Q Now, does the H.264 pool include all of the patents that  
13 are essential to the H.264 standard?

14 A No, it does not. No pool I know includes absolutely all  
15 patents that might exist in the world that might be relevant.

16 Q And so have you been able to determine the total number of  
17 patents worldwide that are essential to the H.264 standards  
18 that are not in the pool, besides, for example, Motorola's?

19 A I am afraid that is not possible for anyone to do, because  
20 many of the disclosures of potentially essential patents made  
21 by parties are made under what we have heard described as  
22 blanket disclosures, that is to say a patentholder discloses  
23 that they have some intellectual property patents in this  
24 area, but they don't enumerate the patents specifically.

25 Q Could you turn to Exhibits 1153 and 1154? First, is

1 Exhibit 1153 a list that you prepared of specific patents  
2 that you identified as potentially essential by firms and  
3 letters of assurance submitted to the ITU that are not part  
4 of the pool?

5 A Yes. That's right. What I did was, I went to the ITU and  
6 I found whatever disclosures I could about specific patents,  
7 that is, not the blanket disclosures, but specific patent  
8 numbers that had been submitted in LOAs, and I made a list of  
9 those. And there are 89 of them.

10 MR. PRITIKIN: Microsoft moves the admission of 1153.

11 MR. BATCHELDER: No objection.

12 THE COURT: 1153 is admitted.

13 (1153 admitted.)

14 By Mr. Pritikin:

15 Q Let's turn to 1154. Is this a list you prepared of  
16 companies and organizations that submitted blanket letters of  
17 assurance and that did not identify the patents individually?

18 A Yes, that's right. On the same source I was able to see  
19 that the following companies had submitted blanket  
20 disclosures, indicating that they had at least one, if not  
21 many, patents that would be applicable under this standard.

22 Q Now, some of the companies that submitted blanket letters  
23 of assurance and didn't list their patents, would you  
24 consider them significant companies?

25 A Oh, indeed. Such little-known entities as AT&T, Broadcom,

1 Intel, Lucent, Matsushita, Phillips, Qualcomm, Thompson.

2 These are very, very major technology companies.

3 Q Now, have you analyzed the royalties that Microsoft would  
4 pay to Motorola for a license to Motorola's portfolio of  
5 H.264 patents under various scenarios based on the MPEG LA  
6 pool rate structure?

7 A Yes, I have.

8 Q And have you prepared a demonstrative summarizing your  
9 conclusions?

10 A I have.

11 Q Let's look at Exhibit 4077. I want to take you through  
12 each of these. Can you explain what the first line shows?

13 A Yes. The first line is using the MPEG LA H.264 pool as a  
14 benchmark, and adjusting that benchmark as if Motorola's  
15 claimed essential patents were a part of that pool. So this  
16 is a number which is easy to calculate, using the pool's  
17 arrangement for sharing the revenues that would come in from  
18 the royalties. And I have made that calculation. It turns  
19 out that the per-unit royalty, that is, the amount payable by  
20 Microsoft on a per-unit basis to Motorola under this  
21 structure would be just under two-tenths of a cent per unit.

22 Q And, again, using just the current year as an example,  
23 what would be the total amount of royalties if this were used  
24 as the RAND royalty that Microsoft would owe Motorola?

25 A For the current information it had in terms of the number

1 of units sold by Microsoft, that would amount to \$502,000 per  
2 year.

3 Q Now, if we look down to the next line, what assumptions  
4 did you make here?

5 A This was where I considered all the other 89 disclosed and  
6 enumerated claimed essential patents in the same calculation,  
7 as if they were in the pool, which of course they are not.  
8 Providing a benchmark is the purpose of the exercise.

9 Q Let me pause on that for a moment. By assuming additional  
10 patents were in the pool, does that lower Motorola's overall  
11 share?

12 A Exactly. And everybody else's, too. But there are a lot  
13 of players who are providing technology in this space. That  
14 is part of the issue. So with that calculation, you will see  
15 the result is similar. It is about .19 cents per unit; or  
16 aggregated on an annual basis, given Microsoft's current  
17 volume of products which use H.264, \$474,000 per year.

18 Q Now, in the next line you say rates are increased by ten  
19 percent. What does that refer to?

20 A The pool contract contemplates that the participants may  
21 elect to increase the pool rates up to a maximum of ten  
22 percent should they deem that useful and appropriate, for  
23 example, if there were more patents in the pool. And in that  
24 case the calculation would go up a little bit to just over  
25 two-tenths of a cent per unit, for an aggregate annual

1 payment for Microsoft's shipping units using H.264 of  
2 \$521,000.

3 Q Now, have the MPEG LA rates actually increased over time?

4 A No, they have not.

5 Q By the way, we talked earlier about the other pool that  
6 Motorola was a member of, the H.264 -- excuse me, the other  
7 MPEG-4 pool. Do you recall that?

8 A The MPEG-4 visual pool, correct.

9 Q How do the royalties in that pool compare to the royalties  
10 in the MPEG LA pool for H.264?

11 A Well, they are very similar. There is a little bit of a  
12 different structure in terms of volume discounting. They are  
13 about 25¢ a unit. Whereas for the MPEG LA pool, it starts  
14 off for the first 100,000 units as royalty free, and then  
15 \$100,000 per unit (sic), up to a limit, and then it goes back  
16 down to 10¢ a unit. They are pretty much in the same  
17 ballpark, and have similar caps as well.

18 Q Let's look at the last line. You say there that these are  
19 the rates based on the Google grant-back provision?

20 THE COURT: Counsel, I'm sorry. Did the witness just  
21 say "\$100,000 per unit up to a limit"?

22 THE WITNESS: No, that is not what I said. If I did,  
23 I misspoke.

24 THE COURT: That is what the reporter wrote down, and  
25 that's what I heard.

1 THE WITNESS: Let me correct what I said then. The  
2 royalty structure for MPEG LA H.264 is royalty free up to  
3 100,000 units. And then from 100,000 to a certain limit it  
4 is 20¢ per unit.

5 THE COURT: Okay.

6 THE WITNESS: And beyond that it is 10¢ per unit. I  
7 apologize.

8 By Mr. Pritikin:

9 Q Let's turn to the last line on Exhibit 4077, Dr. Lynde.  
10 You say -- you show here rates based on the Google grant-back  
11 provision. What is that?

12 A That is a calculation I was able to do using the same  
13 distribution formulas. And that would be how much would be  
14 payable by Microsoft to Google for rights to the H.264 pool  
15 under the grant-back provision that is in the Google license  
16 agreement with the pool itself. And that would be .06 cents  
17 per unit.

18 Q How much would it have been for the past year?

19 A That would be \$167,000 per unit (sic). I should say, that  
20 is assuming that Google would hit one of the caps in the  
21 royalty arrangement. Given Google's size, I think that is a  
22 reasonable assumption. There are two other caps they could  
23 also hit, each as six and a half million. If it does hit  
24 those caps, it turns out the grant-back rate would be just  
25 about two tenths of a cent per unit.

1 THE COURT: Counsel, you need to define what a  
2 grant-back provision is.

3 MR. PRITIKIN: I was going there, your Honor.  
4 By Mr. Pritikin:

5 Q Now, we talked earlier about the Google license with the  
6 MPEG LA pool. What do you mean by a grant-back provision?

7 A There is a condition in that Google license where the  
8 licensee, Google, agrees to grant back rights to the pool for  
9 its H.264-specific standard-essential patents. That's what  
10 this calculation does.

11 Q And has Google clarified this also, agreed to grant back  
12 the rights to the Motorola patents as an affiliate?

13 MR. BATCHELDER: Your Honor, I need to interpose an  
14 objection here. This witness is here to testify as an  
15 economist, not as a lawyer interpreting the meaning of  
16 contracts.

17 THE COURT: I will sustain the objection.  
18 By Mr. Pritikin:

19 Q Now, is the amount that you show in the last line the  
20 amount that is presumed to be fair and reasonable under the  
21 Google-MPEG LA agreement?

22 A Speaking as an economist, I think we looked at that term  
23 in the agreement where a licensee does agree that the rates  
24 they are paying are fair and reasonable.

25 Q And, again, just to clarify, I think you may have

1 misspoken on the \$167,000 and described that as per unit.

2 What is the \$167,000 figure?

3 A That would be the aggregate annual amount payable at the  
4 rate of .065 cents per unit.

5 Q Now, could you turn to Exhibits 1160, 1161 and 1163. Can  
6 you tell us what these documents are?

7 A Yes. These are the detailed calculations for the summary  
8 figures that I just discussed.

9 MR. PRITIKIN: Microsoft moves the admission of 1160,  
10 1161 and 1163.

11 MR. BATCHELDER: No objection.

12 THE COURT: They are admitted.

13 (1160, 1161 & 1163 admitted.)

14 By Mr. Pritikin:

15 Q Let's go back to the Demonstrative 4074 for just a minute.  
16 Now, under the approach that you have proposed under the pool  
17 as a comparable, would this calculation then be done afresh  
18 each year?

19 A Yes, that is the pool arrangement. And that would make  
20 sense, since it depends on geographically differentiated  
21 patent accounts. The patents that are not expired yet or  
22 patents that might be issued would be put into the  
23 calculation and revised each year.

24 Q And does this approach then account for patent expirations  
25 as they occur?



1 A Yes, exactly.

2 Q Now, there has been testimony that Motorola's patents  
3 relate almost entirely to something called interlaced video,  
4 and that that is not important to Microsoft's products. Have  
5 you reduced the level of royalties that Motorola would get to  
6 reflect that?

7 A No. No, I have not. I have simply observed what the  
8 actual real-world pool negotiation resulted in.

9 MR. PRITIKIN: Your Honor, I would offer  
10 Exhibit 1154. I may have skipped over that when we talked  
11 about it.

12 MR. BATCHELDER: No objection.

13 THE COURT: 1154 is admitted.

14 (1154 admitted.)

15 By Mr. Pritikin:

16 Q Now, Dr. Lynde, let's shift gears and talk about 802.11.  
17 Could you turn to Exhibit 1156? Is this a summary that you  
18 prepared of the Motorola patents that Motorola has said are  
19 essential to 802.11?

20 A Yes, that's correct, just like with the other standard, I  
21 made a list of the patents that Motorola in this case has put  
22 forward and has claimed essential.

23 MR. PRITIKIN: Microsoft moves 1156.

24 MR. BATCHELDER: No objection.

25 THE COURT: 1156 is admitted.

1 (1156 admitted.)

2 By Mr. Pritikin:

3 Q How many patents worldwide are on the list?

4 A There are 263.

5 Q And of that, how many are U.S. patents?

6 A Fifty-four.

7 Q Now, what is your understanding of the number of those  
8 U.S. patents that Motorola has claimed are allegedly used in  
9 the Xbox?

10 A My understanding is, given the nature of the Xbox product,  
11 that Motorola has put forward eleven out of the 54 as being  
12 used by the Xbox, although I think I understood that one  
13 might be expired by now.

14 Q Now, you testified earlier that the first benchmark that  
15 you look to in connection with the 802.11 RAND royalty was  
16 the Via Licensing pool. Can we turn to Exhibit 1125? Now,  
17 the Via pool is much smaller than the MPEG LA pool; is that  
18 correct?

19 A It is a much smaller pool, yes.

20 Q And how many licensors participate in the Via pool?

21 A There are currently five licensors.

22 Q And which companies are those?

23 A They are ETRI, Japan Radio, Phillips, LG and Nippon  
24 Telegraph.

25 Q Let's turn to Exhibit 1164. Is this a list you prepared

1 of the licensees of the Via 802.11 pool?

2 A Yes, that's right. These are, as far as I know right now,  
3 the licensees. And there are eleven of them, five of whom  
4 are also licensors or have been licensors.

5 MR. PRITIKIN: And Microsoft moves the admission of  
6 1164.

7 MR. BATCHELDER: No objection.

8 THE COURT: 1164 is admitted.

9 (1164 admitted.)

10 By Mr. Pritikin:

11 Q Now, approximately when was the Via 802.11 pool formed?

12 A It was formed, as I understand it, in the 2003 to 2005  
13 time frame.

14 Q And how does that timeline figure into your analysis here?

15 A Well, this pool is not as ideal as the H.264 pool, first  
16 of all, because it has a lower participation rate, but also  
17 because it was formed really at about the same time when  
18 802.11, also known as WiFi, had become really quite widely  
19 adopted by approximately that time frame. So it wasn't as  
20 much of an ex ante arrangement as an economist would prefer,  
21 in terms of looking at an ideal comparable.

22 Q And what does that do to the rates? Does it push them up  
23 or down?

24 A That would tend to push the rates up, because it would  
25 be -- it would contain some potential for the value to be

1 raised, because the investments had already been made, and  
2 therefore licensors would have more leverage when they went  
3 to get licenses.

4 Q Now, as you did in the case of H.264, did you attempt to  
5 compile a list of patents that were specifically identified  
6 as potentially essential to the 802.11 standard in letters of  
7 assurance submitted to the IEEE?

8 A Yes. Similarly with the ITU standard, I looked at  
9 disclosures for claimed essential patents under the 802.11  
10 standard.

11 Q And would you turn to Exhibit 1158? Is this a summary you  
12 prepared of the patents that are specifically identified in  
13 the letters of assurance, other than Microsoft, Motorola and  
14 the Via licensors?

15 A Yes, that's right. That's what this is in this schedule.

16 MR. PRITIKIN: Microsoft moves the admission of 1158.

17 MR. BATCHELDER: No objection.

18 THE COURT: 1158 is admitted.

19 (1158 admitted.)

20 By Mr. Pritikin:

21 Q Beyond those patents that were declared essential, were  
22 you -- how many additional patents were you able to identify  
23 through letters of assurance?

24 A Well, once again, we have the problem that it is possible  
25 under this SSO's rules to submit blanket disclosures. So

1 many parties submitted disclosures saying they had some  
2 intellectual property in the area of 802.11 networking, but  
3 we don't know -- nobody knows what the aggregate total might  
4 be. It is probably in the thousands.

5 Q Is it acknowledged to be in the thousands widely?

6 A It generally is acknowledged to be in the thousands. And  
7 given that there are 90-odd entities that have submitted  
8 technology under that standard, that is likely to be the  
9 case.

10 Q Let's turn to Exhibit 1159. Is this a summary you have  
11 prepared of the various companies and organizations that had  
12 submitted blanket letters of assurance?

13 A Yes, that's right, that's what this list is.

14 Q And how many are on this list?

15 A We've got -- I believe it is -- the total is 90,  
16 including the ones that have specific disclosures. So there  
17 are 59 that have these blanket disclosures that I was able to  
18 identify.

19 MR. PRITIKIN: Microsoft moves the admission of 1159.

20 MR. BATCHELDER: No objection.

21 THE COURT: It is admitted.

22 (1159 admitted.)

23 By Mr. Pritikin:

24 Q Have you prepared a demonstrative summarizing this  
25 information?

1 A I have.

2 Q Let's look at Exhibit 4078. What is shown here?

3 A This is graphically, I guess, a depiction of the declared  
4 essential-patent situation under 802.11. And you will see  
5 sort of going off into the indefinite top of the bar chart,  
6 nobody actually knows the total number of patents that might  
7 be deemed or actually essential to the standard. But you  
8 also see in this chart that Via has 14; Motorola, who was  
9 apart from this case and did not disclose specific patents,  
10 has 54 in this case. And then I was able to find 150 more  
11 specific patent disclosures.

12 But you will see there are very major intellectual  
13 property-owning companies that have declared that they have  
14 some essential patents in this area, companies such as Sony,  
15 IBM, Atheros, TI, Qualcomm, and also Marvell. And I would  
16 note that we heard from a Ms. Ochs from Marvell earlier this  
17 week, that while they have blanket disclosures, she told us  
18 here that they actually have hundreds of U.S. patents in this  
19 area. So you can see that if Marvell has hundreds, and there  
20 are these other major technologies, the likely total would be  
21 very large.

22 THE COURT: Counsel, let me ask. Would you go back  
23 to Exhibit 1156, please? In the far right-hand side it says  
24 "hypothetical Via pool weight," and then you have two  
25 columns. What is that calculation?

1 THE WITNESS: That, sir, is part of the calculation  
2 that I used to calculate what the benchmark pool license  
3 payment would be if this were a benchmark for a RAND royalty.

4 THE COURT: What is the "weight," as you have used  
5 that term?

6 THE WITNESS: The pool arrangement, like most pool  
7 arrangements, is a patent-count-based distribution, but it is  
8 weighted by geography. If you have more patents in important  
9 geographies like the United States you get more weight in the  
10 distribution of royalties to you.

11 THE COURT: Is this a good time to take a break?

12 MR. PRITIKIN: Sure, your Honor.

13 THE COURT: All right. Counsel, we will be in recess  
14 until 1:30. When we come back, the doctor will be back on  
15 the stand. Any matters that we need to take up between now  
16 and then?

17 MR. HARRIGAN: One question, your Honor. We were  
18 both talking, when would you like the weekend homework  
19 briefing delivered?

20 THE COURT: 9:00 Sunday morning it would be nice if  
21 it was filed. That will give me some time to look at it. In  
22 fact, let's make it noon on Sunday. That would work.

23 MR. PRITIKIN: I am told I did not move the admission  
24 of 1125. I am not very good at this. I will do so now.

25 MR. BATCHELDER: What is that?

1 MR. PRITIKIN: Just the list of the 802.11 licensors.

2 MR. BATCHELDER: No objection.

3 THE COURT: 1125 is admitted.

4 (1125 admitted.)

5 THE COURT: We will be in recess.

6 (Recess.)

7 THE COURT: Please be seated. Counsel, you may  
8 resume.

9 Q Now, Dr. Lynde, before we broke for lunch did you tell us  
10 that there were 35 patents worldwide in the Via pool?

11 A Yes, I think that's the right number.

12 Q Could you turn to Exhibit 52 in the binder.

13 Does this document show the rate structure for the  
14 802.11 pool?

15 A Yes, it does.

16 MR. PRITIKIN: Microsoft moves the admission of  
17 Exhibit 52.

18 MR. BATCHELDER: No objection.

19 THE COURT: It's admitted.

20 (Exhibit No. 52 was admitted into evidence.)

21 Q Can you explain, in general terms, how royalties are  
22 divided among the licensors?

23 A Yes. For the Via pool, the license fees collected by the  
24 licensing pool are redistributed to the contributors to the  
25 pool, based generally on a patent-count basis. But the



1 patent counts are weighted by geography, that is, a  
2 geographic distribution of where the patent rights exist.

3 Q Did you analyze the royalties that Motorola would have  
4 received from Microsoft for a license to its 802.11 essential  
5 patents based on the Via pool structure?

6 A Using this structure as a benchmark, I have made an  
7 estimate of what a RAND-compliant payment from Microsoft to  
8 Motorola would be under a similar kind of arrangement.

9 Q Have you prepared a demonstrative that summarizes the  
10 results?

11 A I have.

12 Q Would you turn to Exhibit 4079. Now, in conducting this  
13 analysis, what, if any, adjustments did you make in order to  
14 account for the fact that the Via pool has relatively low  
15 participation?

16 A In order to make this a better comp, comparable, what I  
17 did was to calculate the rate as if the other identified  
18 claimed essential patents that were available to me were in  
19 the pool. So, for example, through the course of this matter  
20 I'm aware of the claimed essential patents from Motorola, but  
21 there are also some other claimed essential patents. So  
22 putting these in through the calculation, I've made an  
23 estimate of what the equivalent per-unit royalty would be  
24 from Microsoft back to Motorola with this benchmark.

25 Q Now, given the universe of the number of 802.11 essential

1 patents you used, what percentage of the total did you  
2 allocate to Motorola?

3 A Well, because we have got all of the claimed essential  
4 Motorola patents, and a great number are not visible to me,  
5 that calculation is done with about 26 percent of the  
6 patents, not weighted by geography, belonging to Motorola.

7 Q Do you believe that Motorola, in fact, owns 26 percent of  
8 all the patents essential to the 802.11 standard?

9 A Oh, no, not by any stretch of the imagination, because  
10 it's just the fact that we're here in the discovery process  
11 that we have more access to their patents. A great many  
12 patents are disclosed under blanket terms, therefore we don't  
13 know the number, although it's certainly in the thousands.

14 Q And so is this assumption, the 26-percent assumption you  
15 made, is that favorable or unfavorable to Motorola?

16 A Well, it's highly favorable to Motorola in the calculation  
17 that I do. That is a higher implied royalty rate.

18 Q Now, turning back to Exhibit 4079, can you explain what is  
19 shown in the row labeled "current rates?"

20 A Yes. At the current rates and the current claimed  
21 essential patent counts, the estimate would be for about  
22 \$0.05 per unit that Microsoft would pay to Motorola for each  
23 unit that Motorola shipped that had a WiFi capability.

24 Q Or Microsoft shipped?

25 A I'm sorry, Microsoft shipped.

1 Q And you show a \$736,000 number. What is that?

2 A That would be the volume of Microsoft shipments, times the  
3 rate.

4 Q Now, you call these current rates. What do you mean by  
5 current?

6 A This pool, like the MPEG LA pool, has mechanisms for  
7 adjusting the patent-count allocation, depending on the  
8 expiration of certain parties' patents, or new patents coming  
9 on board.

10 Q So as patents expired they would drop out?

11 A Yes, they would.

12 Q Does your proposal contemplate using your calculations  
13 afresh each year, then?

14 A Yes, I believe that's approximately the mechanism that the  
15 Via pool advocates.

16 Q In particular, if we focus on the Motorola 802.11 patents,  
17 do you have an understanding as to whether a number of those  
18 are rapidly expiring?

19 A I have seen expiration dates. I believe that several of  
20 them are expiring next year and several more in 2014.

21 Q What does the row labeled "Rates increased by 25 percent"  
22 show?

23 A This pool collective agreement, like the MPEG LA  
24 collective agreement, contemplates that the parties might  
25 wish to increase the royalty rate should, for example, the

1 participation and contribution of patents increase. So, I've  
2 provided here the maximum increase contemplated in that  
3 collective agreement, which would be a 25 percent increase in  
4 the royalty rates.

5 Q And on that basis what would the current per-unit royalty  
6 be?

7 A In that case the current per-unit royalty would rise to  
8 about 6.5 cents per unit, and would accumulate, in the most  
9 recent year data that's available for Microsoft units, to  
10 \$920,000 per year.

11 Q Did you prepare schedules or summaries that show the  
12 calculations and the basis for the numbers that you have come  
13 up with?

14 A Yes, I did.

15 Q Could you look at Exhibits 1155, 1165 and 1167. And are  
16 these the work papers showing the calculations?

17 A Yes. Yes, they are.

18 MR. PRITIKIN: Microsoft moves the admission of 1155,  
19 1165 and 1167.

20 MR. BATCHELDER: No objection.

21 THE COURT: They are admitted and may be published.  
22 (Exhibit Nos. 1155, 1165, 1167 were admitted into evidence.)

23 Q When you performed this analysis, was it your  
24 understanding that a company called France Telecom was still  
25 part of the Via pool?

1 A At that time it was my understanding, yes.

2 Q And since that time, have you seen information that shows  
3 that company has since withdrawn from the pool?

4 A As I currently look at the Via information, it does appear  
5 that France Telecom may have dropped out of the pool, at  
6 least as a contributor.

7 Q And if you redid the calculations reflecting that, would  
8 that alter your calculations in any meaningful way?

9 A No, it would not. First of all, it's not terribly  
10 material. But, secondly, the method for calculating a  
11 benchmark uses as many identified patents that are claimed  
12 essential, in order to calibrate the benchmark. So it  
13 wouldn't make any difference in the essential part of my  
14 calculation.

15 Q When you presented your summary of conclusions earlier,  
16 you noted that you viewed the royalties derived from the Via  
17 pool to represent a ceiling. What did you mean by that?

18 A Well, the Via pool is not as ideal, for example, as the  
19 MPEG LA pool. It's not done in advance, all of the  
20 significant investment that the industry made in the  
21 standards technology. And it hasn't been able to achieve a  
22 large level of participation, perhaps because the rates are  
23 too high and it didn't attract enough licensees.

24 But for that, for both those reasons, it's my belief that  
25 it would be a higher rate than it would otherwise incur. And

1 in addition, because of the way the evidence has been  
2 presented to me, I've got a relatively high count of Motorola  
3 claimed essential patents, so that gives an artificially high  
4 proportion of the distributed royalty to Motorola.

5 Q Now, in addition to using the Via pool, have you looked at  
6 other benchmarks to confirm your conclusions?

7 A Yes. Given the fact that the pool had these limitations,  
8 I did try to look to other corroborating evidence to make  
9 sure that this estimate of a high-level RAND compliant rate  
10 was reasonable.

11 Q Are you familiar with the terminology, "Smallest saleable  
12 unit," in the context of royalties?

13 A Yes, I am.

14 Q What does that refer to?

15 A My understanding is that the notion is that in calculating  
16 a reasonable royalty for patent damages, that the law is  
17 taking cognizance of the fact that it's difficult to  
18 calibrate the apportioned value of a small component of a  
19 complex device, on the entire market value of that complex  
20 device, like a consumer electronics device.

21 So, it is now recommended, and I believe economically  
22 advisable, to look at the smallest saleable unit when  
23 thinking about a reasonable royalty. That way you are  
24 looking at a royalty rate not on the thousands of others'  
25 contributed technologies that are complementary in producing,

1 say, a PC or some other complex consumer device; but you  
2 really focus on what's appropriate just for the technology in  
3 question. In this case that would be 802.11 compliant WiFi  
4 communications capability.

5 Q And what is your understanding of what Marvell charges  
6 Microsoft for the chip that provides the WiFi functionality  
7 in the Xbox?

8 A As I recalled the testimony from Ms. Ochs earlier this  
9 week, it was \$3 to \$4. I understand Microsoft's view of the  
10 cost of goods sold currently might be at the lower end of  
11 that range.

12 Q Now, you understand that Motorola has urged a royalty rate  
13 of two-and-a-quarter percent for its 802.11 standard  
14 essential patents in this case?

15 A Yes, I do.

16 Q I take it, do you agree that that's a reasonable  
17 percentage royalty?

18 A I do not agree that it is anywhere near RAND-compliant in  
19 structure or level of royalty.

20 Q If you applied Motorola's proposed two-and-a-quarter  
21 percent to the price of the chip, as opposed to the entire  
22 Xbox, what royalty ratings would you obtain?

23 A Two-and-a-quarter percent multiplied times a \$3 or \$4  
24 chip, would be approximately \$0.07 to \$0.09 per unit.

25 Q How does that factor in at all to the numbers you

1 proposed?

2 A I think it provides some corroboration that the  
3 approximately \$0.05 to \$0.06 range for a RAND-compliant rate  
4 is approximately correct.

5 Q Now, another corroborating benchmark you referred to  
6 earlier was the royalties earned by ARM Holdings. And what  
7 technology is involved there?

8 A ARM Holdings is an English company that has specialized in  
9 creating software and other tools for designing what are  
10 called embedded microprocessors. It's the most widely-used  
11 technology for doing that these days. And it really is the  
12 essence of building an ASIC these days, once you license  
13 those tools, and know how from ARM.

14 MR. BATCHELDER: Your Honor, I'll object on  
15 foundation grounds.

16 THE COURT: Would you explain what an ASIC is.

17 THE WITNESS: That's an application specific  
18 integrated circuit, Your Honor.

19 THE COURT: Of course.

20 MR. BATCHELDER: My objection is lack of foundation  
21 about this witness's knowledge about ARM and the ASIC market  
22 and all the rest.

23 THE COURT: Why don't you lay some foundation.

24 MR. PRITIKIN: Sure.

25 Q Dr. Lynde, did you, in the course of the work you did on



1 this case, did you undertake some investigation to learn what  
2 the ARM Holdings license policies are?

3 A I did.

4 Q And where did you gain that information?

5 A From their annual report.

6 MR. PRITIKIN: Your Honor, I think that's a  
7 sufficient basis.

8 THE COURT: Do you wish to renew your objection,  
9 counsel?

10 MR. BATCHELDER: I renew the objection.

11 THE COURT: It's overruled.

12 Q Now, does the technology licensed by ARM include both  
13 patents and know-how?

14 A Yes, it does. And all the tools needed to design an  
15 application specific integrated circuit.

16 Q Is that, in your opinion, more valuable than just the  
17 patents?

18 A Well, I am cognizant that Ms. Ochs said that in terms of  
19 her licensing practices she believes that this, in terms of a  
20 chip like an 802.11-capable chip, that this would be the  
21 ceiling of what value might be for the intellectual property,  
22 because this is the IP that actually builds the chip, and  
23 that was, according to her testimony, one percent.

24 Q Can you tell us, again, why did you select this as a  
25 reference point?

1 A Because it is a ceiling represented by a third party,  
2 Ms. Ochs, as a high level, a maximum level of a reasonable  
3 royalty for IP in creating a chip.

4 Q Did you attach any importance to the fact that Marvell  
5 uses this as a benchmark?

6 A Indeed I did, because Marvell, I understand, is the chip  
7 manufacturer that provides the 802.11-capable chip to  
8 Microsoft, for example.

9 Q Now, are the royalties that are charged by ARM limited by  
10 RAND commitments?

11 A No, they are not.

12 Q Were you able to find publicly-available information on  
13 the royalty revenues received by ARM Holdings?

14 A Yes. In their annual report ARM does report both the  
15 royalty and license fee revenues for their licensing of their  
16 chip design tools.

17 Q Would you turn, please, to Exhibit 1190. And is this the  
18 ARM Holdings annual report for 2011?

19 A Yes, it is.

20 MR. PRITIKIN: Microsoft moves the admission, Your  
21 Honor.

22 MR. BATCHELDER: No objection.

23 THE COURT: It is admitted.

24 (Exhibit No. 1190 was admitted into evidence.)

25 Q From the information in this annual report, were you able

1 to calculate the royalties received by ARM Holdings in 2011  
2 on a per-unit basis?

3 A Yes, because that is exactly the way that you can report  
4 that from the data they provide on aggregate terms. On  
5 average, in this year, ARM was charging between \$0.05 and  
6 \$0.06 per unit. I'm sorry, about \$0.05 for the royalty  
7 component, and about another \$0.04 for the license fee. So  
8 in a range between \$0.05 and \$0.09 per chip.

9 Q Now, if you applied the one percent royalty ceiling or  
10 benchmark Ms. Ochs referred to, and you apply that to the \$3  
11 to \$4 WiFi chip sold by Marvell to Microsoft, what range of  
12 royalties does that give you?

13 A That would give you \$0.03 to \$0.04, of course.

14 Q How does all of this bear on your analysis as to what a  
15 RAND royalty would be for the Motorola 802.11 patents?

16 A This to me provides further corroboration that the range  
17 of \$0.05 to \$0.06 would be an upper limit of what a  
18 RAND-compliant royalty rate would be.

19 Q Have you prepared a demonstrative that summarizes your  
20 conclusions regarding the level of royalties that would be  
21 RAND for Motorola's 802.11 portfolio?

22 A Yes, I have.

23 Q Let's take a look at Exhibit 4080. And is this such a  
24 demonstrative?

25 A It is.

1 Q Would you explain what you have put down here?

2 A Briefly, to recapitulate, in my view the RAND-compliant  
3 royalty for rights to Motorola's 802.11 patents would be no  
4 more than approximately \$0.05 to \$0.06 per unit. And that is  
5 based on the best available comparable of a multilateral  
6 ex ante negotiation from the Via pool arrangement. And I  
7 further corroborated the reasonableness of that by looking at  
8 the ARM Holdings license for critical IP in designing a chip.  
9 And also looking at a royalty rate applied to the value of  
10 the smallest saleable unit, that is a chip.

11 Q And the ARM Holdings gets you to \$0.05 to \$0.09 per unit?

12 A Yes, between \$0.05 and \$0.09 depending on whether or not  
13 you include the license fee.

14 Q And Motorola's two-and-a-quarter percent applied to the  
15 smallest available unit is between \$0.07 and \$0.09?

16 A That's correct.

17 Q So let's turn to another source of corroboration. Did you  
18 consider evidence of Motorola's own internal assessments of  
19 the royalties it could receive for licensing its 802.11  
20 patents?

21 A Yes. That was one other piece of corroborative evidence I  
22 had available to me.

23 Q Would you turn to Exhibit 6, please?

24 A (Witness complies.)

25 Q And is this a Motorola stamp-board presentation regarding

1 802.11 licensing?

2 A This is the same stamp board we saw before, internal  
3 Motorola licensing organization.

4 Q A stamp board, is it your understanding that is the board  
5 that signs off on these licenses at Motorola?

6 A I don't know in detail its responsibilities, but generally  
7 I understand that's the area.

8 MR. PRITIKIN: Microsoft moves admission of  
9 Exhibit 6.

10 MR. BATCHELDER: No objection.

11 THE COURT: If 6 has not previously been admitted it  
12 is admitted now.

13 (Exhibit No. 6 was admitted into evidence.)

14 Q When was this analysis done?

15 A At least this document was dated September 18, 2003.

16 Q Was that around the time that WiFi was beginning to take  
17 off?

18 A Yes, indeed. I think that's the general consensus.  
19 2002/2003 it was really taking off.

20 Q Let's turn to the page with the last three digits, 738.  
21 You understand this to be a valuation summary for the PC  
22 segment?

23 A Yes. As I read the document this is an estimate of what  
24 really the lifetime royalties Motorola was hoping it might  
25 get from licensing this technology to PC OEMs.

1 Q If you look down in the lower right corner, what is the  
2 royalty rate that Motorola hoped to get from laptop computer  
3 makers for a license to its 802.11 patents?

4 A This model, it was based on an assumption of obtaining as  
5 much as one-tenth of one percent of the sales value.

6 Q That would be of the end-sales price?

7 A That would be of the end-sales price.

8 Q Do you have an understanding, from your review of the work  
9 papers, how Motorola came up with that assumption?

10 A Well, the work papers also include an external analysis  
11 from the consultancy, which apparently Motorola retained.

12 Q Who did they retain to help them with this?

13 A They retained a company called InteCap.

14 Q Can you tell us a little bit about InteCap? What is it?

15 A InteCap has been acquired by CRA, but it was an  
16 independent consultancy that specialized in looking at and  
17 valuing patent portfolios. They, in particular, to my  
18 personal knowledge, they were involved in evaluating patent  
19 portfolios for the purpose of monetization, for maximizing  
20 the royalty income that could be obtained.

21 Q Let's look at Exhibits 65 and 66. And are these the  
22 InteCap documents that supported the consideration we looked  
23 at before?

24 A Well, it would appear to me, because of the InteCap  
25 heading, that at least part of this was initially an InteCap

1 evaluation.

2 MR. PRITIKIN: Microsoft moves admission of  
3 Exhibit 65 and 66.

4 MR. BATCHELDER: No objection.

5 THE COURT: They are admitted and may be published.

6 (Exhibit Nos. 65 and 66 were admitted into evidence.)

7 Q Let's start with Exhibit 65 and take a closer look at  
8 that. Now, did InteCap advise Motorola that it needed to  
9 consider the risk of royalty stacking in connection with  
10 802.11?

11 A Yes, this document does discuss the need to consider  
12 stacking, and it actually involves an adjustment for  
13 stacking.

14 Q Let's turn to the page with the last three digits, 289.  
15 And I'll direct your attention to the top. There's a  
16 discussion of competing 802.11 IP. What do you understand  
17 that to be?

18 A My understanding is, is that was InteCap putting out that  
19 there were at least 50 other companies who had declared  
20 essential patents in the 802.11 area, actually there are 90  
21 by now, and that this royalty stacking issue had to be  
22 addressed and recognized in consideration of a royalty.

23 Q Now, when thinking about the problem of stacking more  
24 generally, to what extent is it necessary to take into  
25 account that products, like laptops or the Xbox, need to

1     comply with standards other than just 802.11?

2     A   Well, the stacking problem exists within a standard,  
3     certainly when there are as many as 90 contributors to the  
4     technology. But when thinking about certainly downstream  
5     licensing, it's very important to think about stacking when  
6     you have a number of standards. I understand that the  
7     typical PC has as many as 80 or 90 different formal  
8     standards, at least a couple hundred informal standards,  
9     interoperability standards. So that would need to be taken  
10    into account.

11    Q   Have you seen any indication that Motorola actually used  
12    InteCap's analysis in its business planning activities?

13    A   Well, I'm aware of at least one communication where a  
14    proposed rate structure such as this was discussed by  
15    Motorola personnel in terms of a proposal to an OEM.

16    Q   Would you turn to Exhibit 67? What do you understand this  
17    to be?

18    A   I understand this to be an e-mail from a Motorola person  
19    Mr. Curtis Dave, about a proposed licensing arrangement for  
20    802.11. And as you can see, what he is proposing,  
21    Mr. Curtis, is a final royalty that would be one-tenth of one  
22    percent of their price.

23               MR. PRITIKIN: Microsoft moves admission of  
24    Exhibit 67.

25               MR. BATCHELDER: No objection.



1 THE COURT: 67 is admitted.

2 (Exhibit No. 67 was admitted into evidence.)

3 Q Let me ask you a couple of questions about what InteCap  
4 did to adjust for royalty stacking. What adjustment to the  
5 aggregate royalty for all 802.11 IP did InteCap make for  
6 stacking?

7 A They applied an adjustment factor of 25 percent.

8 Q And did this imply that Motorola held a quarter of the  
9 patents essential to 802.11?

10 A It did imply that Motorola would be entitled to 25 percent  
11 of all the value of the entire standard.

12 Q And what's your reaction to that?

13 A I think that would be gravely exaggerated of the likely  
14 extent and importance of the Motorola patent portfolio in the  
15 standard.

16 Q Do you believe that the .1 percent is too high?

17 A Yes, both in form and level.

18 Q Do you have an understanding whether when InteCap did this  
19 analysis back in 2003, it reflected the fact that Motorola  
20 had made RAND commitments?

21 A My understanding is this was not put forward with any  
22 specific adjustment or contemplation of meeting a RAND  
23 commitment.

24 Q Now, one of Motorola's experts has said that the InteCap  
25 royalty rates are too low because 802.11 has become more

1 widely used over the years. What is your reaction to that?

2 A My reaction to that is that that means that there is more  
3 and more danger of hold-up value. As the value of the  
4 standard becomes greater, there's a greater and greater  
5 danger that an ex post facto negotiated license will include  
6 more and more hold-up, especially if it's negotiated  
7 downstream closer and closer to the consumer at a fixed  
8 percentage of higher and higher end-product values.

9 Q Now, have you been present in the courtroom and heard  
10 testimony about how H.264 and 802.11 are becoming  
11 increasingly important for consumer products?

12 A I have.

13 Q What implications does that have for hold-up?

14 A Well, once again, that exacerbates the potential problem  
15 for hold-up, because ex post facto, that is after the fact,  
16 that the standards have been promulgated and agreed upon by  
17 many parties, and major investments have been made by many  
18 other parties in terms of implementing the standards, so that  
19 they become very widespread and universally expected by the  
20 consuming public, then an essential patent becomes, even one  
21 essential patent becomes, like Dr. Teece an expert for  
22 Motorola in other similar actions put forward, like a bullet.  
23 And you only need one bullet to kill.

24 Q How many essential patents does it take to hold someone  
25 up?

1 A Just one.

2 MR. PRITIKIN: I have no further questions, Your  
3 Honor.

4 THE COURT: Counsel, I can only say the Dr. Seuss  
5 character that is the defender of the trees, it's a good  
6 thing that's fictional, otherwise they'd be very angry at  
7 you.

8 MR. BATCHELDER: I apologize to the Lorax.

9 THE COURT: You may proceed, counsel.

10 CROSS EXAMINATION

11 BY MR. BATCHELDER:

12 Q Dr. Lynde, you should have three binders. Do you have a  
13 velo-bind that has your deposition transcript?

14 A Yes, I do.

15 Q And you should have a smaller binder that has trial  
16 exhibits, and a larger binder with expert reports and a few  
17 other things. Do you have those three?

18 A Seems I do.

19 Q Thank you, sir. Let's begin by talking about what you are  
20 and are not an expert in. You are not an expert in  
21 standards-setting organizations, correct?

22 A No.

23 Q You have no direct experience with standards-setting  
24 organizations?

25 A I do not.

1 Q How many times have you testified in litigation?

2 A Um, at deposition as well as trial, two or three dozen  
3 times, I guess.

4 Q But other than this litigation you've never once testified  
5 on the subject of standards-setting organizations, correct?

6 A Not specifically on the subject of SSOs, no.

7 Q Other than this litigation, you've never written on that  
8 subject, correct?

9 A That's correct.

10 Q Let's talk about patent pools. You've never advised a  
11 client on the subject of patent pools, have you, sir?

12 A Not specifically, no.

13 Q You've never written any economic literature on the  
14 subject of patent pools, correct?

15 A No.

16 Q And you've never been invited to give a talk on that  
17 subject, correct?

18 A No.

19 Q You also addressed RAND in your direct testimony, didn't  
20 you?

21 A Yes.

22 Q You've never negotiated a RAND license, have you?

23 A I have not.

24 Q In fact, you've never negotiated any patent license, have  
25 you, sir?

1 A Well, I'm not a lawyer, I'm an economist.

2 Q The answer is you have not?

3 A I have not. Although I've advised lawyers who are  
4 negotiating contracts.

5 Q Let's talk about that. Of your hundreds of client  
6 consultations, you provided consulting services in connection  
7 with a grand total of six or seven licenses, correct?

8 A I think that's approximately right.

9 Q And not one of them involved a standard essential patent,  
10 correct?

11 A Not to the best of my recollection, no.

12 Q Now, when you were formulating your opinions in this  
13 matter, you never discussed with Microsoft whether its  
14 experience with RAND licensing are consistent with the  
15 opinions that you're rendering in this matter, fair?

16 A I did not.

17 Q Can we put up 2970, please? You've seen this letter  
18 before, haven't you, sir?

19 A Yes, I have.

20 Q This is a 17-page letter on standards setting and RAND  
21 issues sent by Microsoft to the FTC in June of 2011, correct?

22 A Yes, that's my understanding.

23 Q If you turn to the final page you'll see it lists two  
24 Microsoft representatives, there's a David Heiner, who is  
25 Microsoft's vice president and deputy general counsel; and

1 then there is Amy Marasco, Microsoft's general manager of  
2 standards strategy and policy, correct?

3 A I do see that, yes.

4 Q Now, in formulating your opinions in this matter, you did  
5 not speak with Mr. Heiner or Ms. Marasco, correct?

6 A No, I did not.

7 Q In fact, you didn't even know of their existence or even  
8 the existence of this Microsoft FTC letter when you  
9 formulated your opinions, correct?

10 A Um, that's correct, I hadn't personally reviewed it at  
11 that time.

12 Q I'd like to take a look at what Microsoft told the FTC in  
13 this letter about patent hold-up. But before I do I want to  
14 put it in the context of timing. This letter was sent to the  
15 FTC in June 2011, and that was seven months after Microsoft  
16 filed this lawsuit; isn't that right?

17 A I don't know the full sequence of this lawsuit, but I take  
18 that as a given.

19 Q You take my word for it?

20 A Sure.

21 Q Thanks.

22 Keeping that in mind, let's turn to page 16, the third  
23 bullet, and you'll see it begins with a sentence, "There is  
24 little evidence that patent hold-up in the standard context  
25 is a real problem." You see that, correct, sir?

1 A Yes, I do.

2 Q I want the record to be very clear on this point. You  
3 have no basis to disagree with that statement, because you  
4 have no basis, from economic evidence, to conclude whether or  
5 not patent hold-up is a real problem, true?

6 A Well, like Professor Simcoe and Professor Murphy, I am  
7 familiar with the economic literature and the writings on  
8 this as a policy matter, and the potential for this to be a  
9 very grave problem, indeed.

10 Q Could we put up, please, in Dr. Lynde's deposition, page  
11 137, line 23, through 138, line 9.

12 I asked you in your deposition about this very passage,  
13 starting on line 23:

14 "Question. The third bullet point on page 16 of  
15 Exhibit 5" -- which is the FTC letter, begins with this  
16 sentence --

17 MR. PRITIKIN: Excuse me, could we get a copy of the  
18 deposition?

19 Q "Question: The third bullet point on page 16 of Exhibit 5  
20 begins with this sentence. 'There is little evidence that  
21 patent hold-up in the standards context is a real problem.'  
22 Do you see that?

23 "Answer: I do.

24 "Question: Do you agree?

25 "Answer: I have no basis from economic evidence to

1 conclude whether or not patent hold-up is a real problem.  
2 But I have no basis to disagree with the statement as  
3 Microsoft has put forward."

4 Have I read correctly, sir?

5 A Yes, that's right.

6 Q If we could turn to page 2 of the same document,  
7 Exhibit 2970, the last bullet point there. I'd like to  
8 invite your attention to the first two sentences "Concerns  
9 about patent hold-up should not extend to any bilateral  
10 business disagreement between two companies regarding  
11 proposed licensing terms. These discussions typically  
12 pertain to a broader set of questions than just the proposed  
13 licensing terms for essential patent claims reading on a  
14 standard." Do you see that, sir?

15 A Yes, I do.

16 Q You don't have any particular basis to disagree with that  
17 statement either, do you?

18 A Well, that's simply Microsoft's view about bilateral  
19 negotiations.

20 Q My question is, you don't have any particular basis to  
21 disagree with that view, do you?

22 A I don't know why I would, that's their view as expressed  
23 in this letter.

24 Q Thank you, sir.

25 If you could turn to page 14 in the same document,



1 second paragraph. You see at the top it refers to, if a  
2 patentholder makes a disclosure about its essential patent  
3 claims, then the last sentence says, "Any negotiations  
4 typically are conducted bilaterally and outside the SS0." Do  
5 you see that?

6 A Yes, I do.

7 Q You agree with that statement too, don't you?

8 A Well, that is, as the letter states, pursuant to the  
9 specific circumstances of Microsoft, I presume.

10 Q You agree that such negotiations are conducted bilaterally  
11 and outside the SS0, typically?

12 A I don't know what "such," refers to. Many people license  
13 through the pool, that's an efficient way to proceed. Other  
14 negotiations are bilateral.

15 Q Sir, you agree that negotiations over SEP licensing are  
16 typically conducted bilaterally, true?

17 A I don't have any basis to quantify one way or the other.  
18 But economists know it's very efficient to have efficient  
19 contracting through a pool. That saves a lot of bilateral  
20 negotiating costs.

21 Q Let's pull up Dr. Lynde's deposition, page 136, lines 10  
22 through 17. Directing your attention to that same passage we  
23 were just looking at and the FTC letter.

24 "Question: The final sentence of that paragraph says  
25 any negotiations typically are conducted bilaterally and

1 outside the SS0. Do you see that?

2 "Answer: I do.

3 "Question: Do you agree with that?

4 "Answer: That's -- in my experience, that's generally  
5 correct." Have I read correctly, sir?

6 A Yes, that's true, in my experience.

7 Q A RAND SEP license can result from an ex post bilateral  
8 negotiation, can't it, sir?

9 A It might, yes.

10 Q And, in fact, you agree that RAND license terms are  
11 typically arrived at through bilateral negotiations, correct?

12 A Assuming that the RAND commitment is binding, that is  
13 possible.

14 Q My question, sir, is do you agree that RAND license terms  
15 are typically arrived at through bilateral negotiations?

16 A Parties that have bilateral negotiations and reach an  
17 agreement for SEPs, reach an agreement sometimes on  
18 RAND-compliant rates.

19 Q When you formulated your opinions in this matter, there  
20 was no Motorola license involving its 802.11 or H.264  
21 patents, as to which you had any specific evidence that  
22 hold-up was involved, correct?

23 A Um, well, yes, that's correct. Because it's a very  
24 fact-intensive investigation.

25 Q And that's an investigation you did not undertake?

1 A Well, I did undertake it for the circumstances of this  
2 case with respect to two standards in the Motorola patent  
3 portfolios.

4 Q Just so the record is clear, sir, when you formulated your  
5 opinions, there was no Motorola license involving its 802.11  
6 or H.264 patents, that you had any specific evidence that  
7 hold-up was involved, correct?

8 A Of specific license agreements, no. I was analyzing the  
9 proposal.

10 Q Let's move on to the subject of royalty stacking. The  
11 economic analysis of royalty stacking is a subject in the  
12 professional literature that you're familiar with and  
13 consider yourself an expert in, true?

14 A Yes.

15 Q And the WiFi 802.11 industry is about 13 years old,  
16 correct?

17 A Approximately.

18 Q All right. Now, when you were deposed in this matter just  
19 a few months ago, and all that time in the WiFi industry in  
20 the aggregate, royalty stacking had never been a problem,  
21 right?

22 A Well, there's some debate in the professional literature  
23 about whether it is or how much potential problem it could  
24 be. There are a vast number of claimed essential patents out  
25 there. Nobody knows the number. And for the moment, as

1 Professor Murphy pointed out, for almost all those, the  
2 current royalty is zero. It's royalty free. There is  
3 forbearance. But that doesn't mean this could not be a very  
4 significant policy problem currently, and in the future.

5 Q Will you pull up Dr. Lynde's deposition, page 211, lines  
6 11 through 23.

7 "Question: Is royalty stacking a problem for the WiFi  
8 industry?

9 "Answer: Once again, I'm not aware of economic  
10 literature analyzing the difficulties presented by stacking.  
11 What I am aware of is that there are a large number of 802.11  
12 related patents, many of which have not been asserted or  
13 licensed, but are effectively not earning any royalty, and  
14 that the 802.11 standard has been very widely implemented  
15 around the world. So by that criteria, in the aggregate, it  
16 has not been a problem." Did I read correctly, sir?

17 A I think that's what I just said.

18 Q Did I read correctly?

19 A You did.

20 Q Thank you. Turning to H.264, that industry is more than  
21 nine years old, correct?

22 A Approximately.

23 Q And in the H.264 industry, when you were deposed in this  
24 matter, you were not aware of any literature to the effect  
25 that implementers of the H.264 standard are suffering from a

1 stacking problem, correct?

2 A Well, largely thanks to the pool. It's a very successful  
3 pool.

4 Q Is that a yes, sir?

5 THE COURT: Don't interrupt, counsel.

6 MR. BATCHELDER: I apologize. I didn't mean to  
7 interrupt. I thought you were done.

8 A Yes, I'm not aware of professional literature reviewing an  
9 assessment of any problem in that area. It's a very  
10 successful pool. Those outside the pool, for the most part,  
11 have forbore from charging royalties.

12 Q There is no literature that you know of to the effect that  
13 implementers of the H.264 standard are suffering from a  
14 stacking problem, correct?

15 A As I said, I'm not aware of any such literature right now.

16 Q And let's move on to the subject of patent pools. Can we  
17 put up 3013, please?

18 Now, this is an article entitled, "The Complements  
19 Problem Within Standard Setting: Assessing the Evidence on  
20 Royalty Stacking." And the lead author is Damien Geradin.  
21 You've seen this before, haven't you, sir?

22 A Yes.

23 Q And you've considered it?

24 A Yes.

25 Q Could we turn to page 167, please. And the first

1 paragraph, and if I could read starting with that second  
2 sentence there. "Under a pool, owners of patents deemed  
3 essential to a standard, opt to form a joint license in order  
4 to bundle at least some subset of the essential IPRs into a  
5 single package. The participating firms agree on an  
6 aggregate royalty rate for the package, and on a method of  
7 dividing the royalty earnings amongst themselves. As part of  
8 the arrangement, members often get a discounted cross-license  
9 to one another's patents." You see that, sir?

10 A I do.

11 Q And you have no basis to disagree with that statement that  
12 I just read to you?

13 A I have no basis. I am not aware of any particular  
14 instances of discounted cross-licensing, though.

15 Q Particularly you have no basis to disagree that pool  
16 members often get a discounted cross-license to one another's  
17 patents, correct?

18 A I have no knowledge of that particular assertion.

19 MR. BATCHELDER: Motorola offers 3013.

20 MR. PRITIKIN: No objection.

21 THE COURT: It is entered.

22 (Exhibit No. 3013 was admitted into evidence.)

23 MR. BATCHELDER: I also need to offer 2970, the FTC  
24 letter.

25 MR. PRITIKIN: No objection.

1 THE COURT: It is admitted.

2 (Exhibit No. 2970 was admitted into evidence.)

3 Q Both the MPEG LA and Via patent pools divide royalties  
4 based upon a patent-counting approach?

5 A Basically it's a little more refined, but that's the basic  
6 idea.

7 Q Neither the MPEG LA pool nor the Via pool does anything to  
8 assess the relative value of given participant's SEP  
9 contributions, correct?

10 A Well, that's correct, and for a very good reason. This  
11 whole dispute shows how difficult it would be if the parties  
12 started squabbling about, you know, "My patents are better  
13 than your patent," and the like. And the whole point of  
14 these standards is just to agree on a standard. That's the  
15 point, rather than arguing about relative values. To the  
16 extent that there are any relative value differences, they  
17 are assumed to be reasonably dealt with. And this is what we  
18 observe empirically. This is not made up out of theory.  
19 Empirically, what do parties do in these pools? They say,  
20 let's not disagree about relative values, let's distribute on  
21 the basic patent-count method, without all the huge  
22 transactions costs of disputing over relative value.

23 Q Is that a yes?

24 A Yes, sir.

25 Q So one patent in the pool could be critical to a core

1 feature of the standard and it could be a feature that most  
2 standard-compliant products use and rely on heavily. And  
3 another patent could be directed to a feature that's  
4 tangential or optional and rarely ever used, and in the pool  
5 both would get the identical royalty rate, correct?

6 A In the aggregate and on the average that's the way these  
7 pools have come together and have formed an agreement.  
8 That's what we simply observe empirically from the parties  
9 that know the relative values and the meaning of that best.

10 Q Is that a yes, sir?

11 A Yes.

12 Q In this case Motorola is not relying on patent pools as  
13 comparables, but you are, correct?

14 A In terms of assessing what a RAND-compliant rate would be?

15 Q As a comparable, yes.

16 A Well, yes.

17 Q And you have not evaluated whether the average value of  
18 Motorola's 802.11 SEPs is higher or lower than the average  
19 value of the Via 802.11 patents, have you, sir?

20 A I have not, to the extent that there is technical  
21 testimony from technical experts about whether there are  
22 easily available ex ante alternatives, that would bear on the  
23 economic question of value. But I have not made any  
24 technical assessment, knowing that the parties aren't  
25 contesting those issues.



1 Q You have also not evaluated whether the average value of  
2 Motorola's H.264 SEPs is higher or lower than the average  
3 value of the MPEG LA patents?

4 A I have not, nor is it necessary if one relies on the  
5 real-world multilateral negotiation, the parties most  
6 knowledgeable, who entered freely into a multilateral  
7 negotiation, and agreed upon a structure, which went on a  
8 patent-count allocation method.

9 Q You didn't do that analysis, right, sir?

10 A As I said, it was not necessary.

11 Q Patent-counting pools are sometimes referred to as  
12 numeric-proportional pools, correct?

13 A Sometimes, yes.

14 Q If I could have 1036, please.

15 And this is a paper, with the cute name "To Join Or Not  
16 to Join. Examining Patent Pool Participation and Rent  
17 Sharing Rules." Principal author Anne Layne Farrar, correct?

18 A Yes. One of the authors of the previous papers as well.

19 Q You've seen this before, haven't you?

20 A Yes, I have.

21 Q If we could turn to page 295, it's also the Bates number  
22 ending in 92902. If we could pull up line 7. This paper  
23 says that, "Firms with higher value patent portfolios are  
24 less likely to join a numeric proportional pool." Do you see  
25 that, sir?

1 A Yes, I do.

2 Q And you agree with that statement, don't you?

3 A As an economic analysis, that's a possibility, yes.

4 Q So the stronger my patents, the less likely I am to join  
5 the pool.

6 THE COURT: Counsel, someone has got their cell phone  
7 close to a microphone.

8 Q The stronger my patents, the less likely I am to join a  
9 pool?

10 A Well, not necessarily. We see a lot of blue-chip patents  
11 joining the H.264 pool, because there are many other reasons  
12 to join the pool, apart from just exploitation through  
13 maximizing royalties.

14 And so there's a balance that needs to be considered in  
15 that regard.

16 Q My question wasn't about what is necessary, sir, my  
17 question is about likelihood. And the stronger my patents  
18 the less likely I am to join a pool, right?

19 A Well, everything else equal, from a matter of economic  
20 theory, yes. But the empirical observation is that a very  
21 large number of blue-chip companies contributed major  
22 patents, 2,500 patents to the H.264 pool, for example.

23 Q We'll get to that in a minute, and we'll get to who  
24 decided not to join. You agree, though, that the  
25 patent-counting method favors parties that have large numbers

1 of low-value patents, correct?

2 A Well, not necessarily. But everything else equal, as a  
3 point of economic analysis, that might be possible.

4 Q All right. Let's talk about transaction costs. The  
5 bilateral negotiation can take a long time and be expensive,  
6 correct?

7 A Indeed they can.

8 Q Often involve many months, even sometimes multiple years,  
9 correct?

10 A That's my general understanding.

11 Q And you agree that royalty rates can be set lower in  
12 patent pools because of the reduced transaction costs,  
13 correct?

14 A A more efficient process could certainly benefit all  
15 parties, both providers of technology and users of  
16 technology. That's one reasons economists feel so strongly  
17 that pools are pro-competitive and benefit the public.

18 Q Coming back to my question, sir, you agree royalty rates  
19 can be set lower in patent pools because of the reduced  
20 transaction costs, correct?

21 A Might be lower, it depends. But it might be lower, it  
22 depends, but it might be lower if there are reduced  
23 transaction costs. All parties can win in that situation.

24 Q Can we see Dr. Lynde's deposition page 166, lines 10  
25 through 14.

1           "Question: Do you agree that royalty rates can be set  
2 lower in patent pools because of the reduced transaction  
3 costs?

4           "Answer: Other thing equal, that could result because  
5 the transaction costs have been saved." Have I read  
6 correctly, sir?

7 A I hope I said "other things equal" but what you read was  
8 correct and that's what I just said also.

9 Q I'm going to read you a statement, sir. "Some firms  
10 become patent pool licensors because they place a higher  
11 value on ease of licensing than on maximizing licensing  
12 revenue." And you agree with that statement?

13 A That's certainly possible.

14 Q The better established a company's licensing program, the  
15 less likely it is to join a pool, correct?

16 A I have no basis to know whether or not that's true.

17 Q Certainly an economic possibility, isn't it, sir?

18 A Many things are.

19 Q Including that one, sir?

20 A It's economically possible, yes.

21 Q There's nothing un-RAND about securing, in a  
22 bilaterally-negotiated license agreement, the transaction  
23 costs incurred in connection with those negotiations, true?

24 A If it's just with respect to the transactions cost, no, as  
25 long as the bargain that is reached is compliant with the

1     licensor's RAND promise.

2     Q     Sir, doesn't that mean that that fact alone biases your  
3     analysis? Because you're imposing a royalty rate from a very  
4     low transaction cost in patent pools on to a bilateral  
5     negotiation that has a higher transaction cost. That's an  
6     apples to oranges biased comparison.

7     A     No, I don't think so. Because the transactions  
8     cost-benefit could be equally shared between the licensor and  
9     the licensee. As I said, all parties would gain from lower  
10    transactions costs.

11    Q     That's not the question. You're imposing a royalty rate  
12    from a low-transaction cost environment on to a different  
13    environment, a bilateral environment between Motorola and  
14    Microsoft, and that has high transaction costs, correct?

15    A     Yes. Then the question comes under the RAND obligation,  
16    whose burden is it to pay that transaction cost? It could be  
17    both parties.

18    Q     Yes or no, sir. Is maximizing profits contrary to RAND?

19    A     Well, maximizing profits for an economist always involves  
20    the constraints of technology and the law, and promises. So  
21    maximizing profit under the constraints of the law and of  
22    promise is consistent with economic theory.

23    Q     Sir, are you unable to answer that question yes or no?

24    A     I thought I answered it accurately.

25    Q     Let me see Dr. Lynde's deposition, please, page 150 lines

1 10 through 12.

2 "Question: Is maximizing profits contrary to RAND?

3 "Answer: No." Have I read correctly, sir?

4 A Yes. And that's what I just said.

5 Q Let's talk about, and I mentioned a moment ago I would, a  
6 few examples of companies that decided not to join the  
7 MPEG LA patent pool. Motorola, IBM, and Nokia, among others,  
8 all chose not to join MPEG LA pool, correct?

9 A That's my understanding, yes.

10 Q Even though each of those entities has a significant  
11 portfolio of H.264 essential patents, correct?

12 A Well, they're blanket disclosures, but probably fair to  
13 say they have large portfolios.

14 Q It's fair to say they have significant portfolios,  
15 correct, sir?

16 A Nobody knows, but I would agree that's likely to be the  
17 case.

18 Q Could we put up Dr. Lynde's deposition, page 158, lines 5  
19 through 10.

20 "Question: Motorola didn't join. IBM didn't join.  
21 Nokia didn't join. Correct?

22 "Answer: That's my understanding.

23 "Question: Each of those entities has a significant  
24 portfolio of H.264 essential patents, correct?

25 "Answer: That's also my understanding." Correct, sir?

1 A But isn't that what I just said?

2 Q That is your understanding. You just said nobody knows.  
3 But it is your understanding that each of those entities,  
4 including Motorola, has a significant H.264 patent portfolio,  
5 correct?

6 A That's my understanding.

7 Q Thank you. Now, they shouldn't be forced to join the  
8 MPEG LA pool, those three entities, should they?

9 A No one should be forced to join a pool, no.

10 Q There's nothing wrong with those entities choosing to  
11 license their SEPs outside the pool, correct?

12 A No, nothing wrong, as long as they comply with the RAND  
13 obligations.

14 Q Let's focus on IBM and Nokia for a moment. In formulating  
15 your opinions in this matter, you didn't uncover any evidence  
16 that any of the licensees who have licensed H.264 patents  
17 from IBM or Nokia, have complained that those licenses are  
18 non-RAND or the subject of hold-up or stacking, correct.

19 A I'm not aware of any evidence that there are any such  
20 licenses, let alone that they aren't royalty-free.

21 Q You just don't know one way or the other?

22 A I'm not aware, no.

23 Q You didn't look?

24 A Well, I know that Microsoft does not have any licenses to  
25 any of the other ones that are outside the pool, and the only

1 issue right now is with Motorola.

2 Q Beyond that did you look into Nokia or IBM, sir?

3 A Well, their licenses are not in evidence. All I know is  
4 that it's not a problem for Microsoft.

5 Q Let's move to the 802.11 pools, sir. Speaking of  
6 Microsoft, Microsoft itself chose not to join that pool,  
7 correct?

8 A For the Via licensing? Yes, that's correct.

9 Q I take it in formulating your opinions in this matter you  
10 went to Microsoft and you asked, why. Didn't you?

11 A I don't recall doing that.

12 Q So you never asked?

13 A Not that I recall.

14 Q And you don't have a reason for not asking, do you?

15 A It wasn't necessary for my -- the method I was applying.

16 Q Are you now saying you have a reason, sir?

17 A It wasn't necessary.

18 Q Can we put up Dr. Lynde's deposition, please, 155 lines,  
19 19, through 156, 6.

20 "Question: The Via pool does not include all 802.11  
21 SEP owners, correct?

22 "Answer: That's correct.

23 "Question: Does not include Microsoft, correct?

24 "Answer: Correct.

25 "Question: Why didn't Microsoft join the Via pool?



1 "Answer: I don't know.

2 "Question: Have you asked?

3 "Answer: I did not.

4 "Question: Why not?

5 "Answer: I did not ask.

6 "Question: The question is, why didn't you ask?

7 "Answer: I don't know." Have I read correctly, sir?

8 A You have.

9 MR. PRITIKIN: I think we should read into the record  
10 the next question and answer.

11 "If Microsoft had decided not to join the Via pool because  
12 it believed the royalty rate associated with Via was below  
13 what it should be, would that be relevant to you in your  
14 opinions?

15 "Answer: No, I don't believe so. Because I was looking  
16 for the best available evidence for a multilateral  
17 negotiation, not with respect to any one party's view of how  
18 the multilateral and hold-up problem was to be solved."

19 Q Dr. Lynde, let's talk specifically about Microsoft's  
20 reasons. Can we put up 3194, please? Have you seen this  
21 document before?

22 A I'm sorry, it's kind of hard to read on the screen here.

23 Q Let's blow up the first passage, make it as large as you  
24 need. Can you read it now?

25 A I can. Thank you.

1 Q Have you seen this before, sir?

2 A I don't recall at the moment.

3 Q I'm going to then ask you to make some assumptions in  
4 connection with this document. Let me start with the back  
5 page, the signature block. Read there, the name Peter  
6 Derania, licensing business manager, Via Licensing  
7 Corporation. Do you see that?

8 A Yes, I do.

9 Q Let's go back up to the top to that first e-mail. You'll  
10 see it's from Peter Derania, correct?

11 A Correct.

12 Q And the first line it says, "I did discuss the 802.11  
13 program with Paul Bawel yesterday." Do you see that?

14 A Yes, I do.

15 Q You were here for Mr. Glanz's testimony when he explained  
16 Paul Bawel had come to Microsoft by this time?

17 A I did hear that he was a Microsoft employee for a period  
18 of time, although apparently not currently.

19 Q But he was a Microsoft employee as of this time, correct,  
20 sir?

21 A I don't know the exact timing of his employment.

22 Q In the fourth line you'll see he says that Microsoft -- he  
23 said that, "Microsoft prefers to enter into bilateral  
24 discussions with the licensors individually. And actually  
25 before that he says, Paul's objections to taking a license

1 last year were the lack of licensees and critical mass of the  
2 program. He said that Microsoft prefers to enter into  
3 bilateral discussions with the licensors individually." Do  
4 you see that?

5 A With respect to that pool, which had relatively few  
6 patents in it, I do understand that.

7 Q And you don't have any reason to dispute that this was  
8 Microsoft's reason for not joining the Via pool, do you?

9 A I do not. If that's one of the stated reasons, it makes  
10 sense.

11 Q All right. Well assume that was the reason, sir.  
12 Microsoft simply preferred bilateral negotiations over pool  
13 licensing for 802.11. Microsoft would have been perfectly  
14 entitled to make that choice, correct?

15 A Of course.

16 Q And Motorola made the same choice, right? Just like  
17 Microsoft, it chose not to join the Via pool and instead to  
18 negotiate its 802.11 patents bilaterally, correct?

19 A Apparently, yes.

20 Q All right. Let's pull up 4080, which is one of the  
21 demonstratives that you just presented.

22 MR. BATCHELDER: Before we get there, Your Honor, I'm  
23 told I need to offer in 1036, 3194 and 4080.

24 MR. PRITIKIN: What was the second exhibit?

25 MR. BATCHELDER: 3194. Strike the 4080, I think

1 that's just demonstrative.

2 MR. PRITIKIN: We have no objection to 1036 or 3194.

3 THE COURT: Then they are admitted.

4 (Exhibit Nos. 1036 and 3194 were admitted into evidence.)

5 Q Dr. Lynde, just to demonstrate to the court that I did, in  
6 fact, attend the court's technology tutorial, I've circled on  
7 4080, the phrase "smallest saleable unit" from your graphic.

8 Do you see that there?

9 A Yes, I do. Well done.

10 Q Thank you, sir. Let's see if I can remove it at the end.  
11 I take it you're referring there to the Marvell chip?

12 A I am, indeed.

13 Q Now, for a given patent claim, that term "smallest  
14 saleable unit" refers to the smallest saleable unit that  
15 alone practices every element of that patent claim, correct?

16 A Well, sir, it sounds like a legal conclusion. My general  
17 economic understanding of smallest saleable unit is the item  
18 is in commerce for which we can observe an arms-length  
19 transaction for a component or part that embodies essentially  
20 the functionality of the patent.

21 Q I'm just going to repeat my question to make sure we have  
22 a clear record as to whether or not you know the answer. For  
23 a given patent claim, the term smallest saleable unit refers  
24 to the smallest saleable unit that alone practices every  
25 element of that claim, correct?

1 A Well, once again, sir, that sounds like you want me to  
2 reach a legal conclusion, from what I take from your  
3 precision of your legal language. And I'm not offering a  
4 legal opinion.

5 Q Okay. So you just don't know what the legal standard is,  
6 is that fair?

7 A Not as a lawyer. I think I heard it earlier this week,  
8 just as an economist.

9 Q Using the Xbox as an example, for many of the patent  
10 claims in Motorola's 802.11 portfolio, the Marvell chip alone  
11 does not practice all elements of the claim, and instead  
12 other components of the Xbox are needed to practice those  
13 elements, correct?

14 A I have no personal knowledge whether or not that's true.

15 Q Didn't Dr. Williams explain that in his rebuttal expert  
16 report that you read, sir?

17 A I believe I recall that. But once again, I have no  
18 personal knowledge of that.

19 Q So you just don't know?

20 A It sounds to me like you're asking a very precise legal  
21 question. I'm only observing the economic problem of  
22 apportionment. And the Fed Circuit has clearly made that  
23 view, if you look at the smallest saleable unit you're likely  
24 to get closer to the value of the patent as opposed to the  
25 EMVR problem, the Entire Market Value Rule problem, of

1 charging royalties on an entire collection of various  
2 technologies, such as would be included in a PC.

3 Q Just to make sure the record is clear, sir, you do or you  
4 don't know one way or the other whether or not for many of  
5 the patent claims in Motorola's 802.11 portfolio, the Marvell  
6 chip alone does not practice all elements of the claim, and  
7 instead other components of the Xbox are needed to practice  
8 those elements?

9 A I don't believe I have the expertise to offer an opinion  
10 on that.

11 Q And you heard Mr. Del Castillo testify yesterday?

12 A Only in part.

13 Q You left for part of his testimony?

14 A I hate to say this, but I came in a little late.

15 Q You're aware, though, I take it, that he testified  
16 yesterday that Xbox software provides some of the Xbox's  
17 802.11 functionality, correct?

18 A I believe I did hear, at least part of that testimony,  
19 yes.

20 Q So, when you used this phrase "smallest saleable unit" in  
21 your demonstrative, and in your testimony to His Honor, you  
22 didn't mean to suggest that the Marvell chip was sufficient  
23 to practice the 802.11 functionality in the Xbox, correct?

24 A I did not mean to imply that. My understanding from  
25 Ms. Ochs' testimony is that that chip has full 802.11

1 functionality. And I'm not aware of any other component that  
2 has an arms-length price which could even approximate the  
3 smallest saleable unit, which is what the economist is  
4 looking for in terms of determining a component value.

5 Q To be clear, you didn't mean to suggest that the chip  
6 itself was sufficient to practice all the 802.11  
7 functionality in the Xbox, did you, sir?

8 A Gosh, sir, that seems like that same question has been  
9 asked a bunch of times. I'm not sure that I understand the  
10 nuance of this latest version. I'm not offering a legal  
11 opinion about claims, or what's practiced, or for what part.  
12 To an economist, it's obvious that chip is the smallest  
13 saleable unit.

14 Q Sir, as to any Microsoft product, the Xbox, the Surface,  
15 anything, you don't mean to suggest to the court that the  
16 chip alone is sufficient to practice all the 802.11  
17 functionality in the product, correct? Yes or no.

18 A My understanding is that the chip does provide all  
19 necessary 802.11 functionality.

20 Q Even though Dr. Williams has rendered opinions in his  
21 report to the contrary, and even though Mr. Del Castillo  
22 testified yesterday that the Xbox software provides some of  
23 the Xbox 802.11 functionality?

24 A Once again, just from the testimony I've heard in terms of  
25 smallest saleable unit, this is the only thing that could

1 reasonably be construed in that way, irrespective of what  
2 these technical or legal differences might be.

3 Q Look at that, I eliminated my circle.

4 A Congratulations.

5 Q I'm going to draw another one. Let's move on to ARM. You  
6 refer there to ARM Holdings. And I take it you're telling  
7 His Honor that the ARM license agreement is a comparable that  
8 he should rely on in this matter; is that correct?

9 A No, I don't think I said that. I said this was  
10 corroborative information about what chip licensing maximums  
11 could be.

12 Q Is it a comparable, sir?

13 A It is not a comparable to an ex ante multilateral  
14 negotiation, that would be the pool rate indicated by the Via  
15 arrangement.

16 Q Now, this reference to ARM Holdings that I circled, it's  
17 actually a reference to a publicly-available chip license,  
18 correct?

19 A That's correct.

20 Q But you formulated your opinions about ARM, having never  
21 seen the ARM license itself, correct?

22 A Um, I don't think I've seen the ARM license itself. I  
23 don't manufacture application specific integrated circuits.

24 Q In connection with your work on this case, you didn't  
25 actually look at the ARM license itself, did you?



1 A No, I did not. I looked at the annual report where it is  
2 possible to calculate what the average per-unit royalty  
3 received from their arrangement is.

4 Q You did not attach the ARM license agreement to your  
5 expert report, did you?

6 A I did not.

7 Q It's not in evidence in this case, is it, sir?

8 A I do not know.

9 Q Did you ask that it be in evidence?

10 A I did not.

11 Q It's not on Microsoft's exhibit list, is it?

12 A I do not know.

13 Q Did you ask it be put on Microsoft's exhibit list?

14 A I did not.

15 Q In formulating your opinions in this matter, you did not  
16 learn what specific restrictions the license imposes on the  
17 use of ARM's patents, did you, sir?

18 A I have not reviewed the agreement. I'm sure it's a  
19 lengthy one.

20 Q And you did not learn what specific restrictions the  
21 license imposes on the use of ARM's patents, did you?

22 A I did not.

23 Q In formulating your opinions in this matter, you did not  
24 determine whether the ARM license would cover a licensee  
25 making its own chip without using ARM's tools, did you?

1 A I did not.

2 Q And if the license is restricted to chips designed with  
3 ARM's tools, then it would be less valuable than an  
4 unrestricted patent license, possibly quite a bit less  
5 valuable; is that correct?

6 A I don't think I understand that question. The whole  
7 purpose is to use ARM's proprietary technologies to design  
8 ASICs.

9 Q I'm going to repeat it, sir, and see if you can get it.  
10 If the license is restricted to chips designed with ARM  
11 tools, then it would be less valuable than an unrestricted  
12 patent license, possibly quite a bit less valuable; is that  
13 fair?

14 A No, I don't agree with that.

15 Q Can we put up Dr. Lynde's deposition, page 236, line 13,  
16 through 237, line 6. Can you blow up 236 line 13, please?

17 "Question: If I took a license to the ARM license that  
18 you've seen described on the website, and I didn't use the  
19 ARM tools to create a chip, but I made my own chip in my own  
20 way, would my chip be licensed under the ARM patents?

21 "Answer: I don't know. If you didn't use the tools or  
22 the reference design or anything else having to do with ARM,  
23 I don't see how it would have a relationship to ARM.

24 "Question: Wouldn't that make it a less valuable  
25 license than a straight-up patent license that would allow me

1 to sell whatever chips might practice a given patent?

2 "Answer: With respect to an unrestricted license to  
3 the ARM patent portfolio, with respect to that comparison,  
4 yes, it might be somewhat less valuable.

5 "Question: Quite a bit less valuable, right?

6 "Answer: Possibly." Have I read correctly, sir?

7 A Yes.

8 Q And, sir --

9 MR. PRITIKIN: I think we should read at least the  
10 rest of the answer.

11 Q All right. "Possibly. But the point of taking the  
12 license from ARM is to design ASICs." Have I read that  
13 correctly, sir?

14 A Yes.

15 Q And the ARM license doesn't involve standard essential  
16 patents, does it?

17 A No, indeed, it's a proprietary standard.

18 Q Let's turn briefly to InteCap. When the InteCap study was  
19 undertaken in 2003, there was significant near-term  
20 uncertainty, as to the competitive landscape of the value  
21 achieved, is that fair?

22 A Well, earlier on in the implementation of the technology  
23 that's generally true.

24 Q Motorola has not relied on the InteCap study in any way  
25 since the early 2000's, approximately the time frame that the

1 study was completed, correct?

2 A I'm not aware of any evidence whether they have or not.

3 Q One reason that Motorola has not relied in any way on the  
4 InteCap study for the last nine years, is because the study  
5 was based on projections, and those projections fell short of  
6 reality, correct?

7 A I believe there's some testimony to that effect.

8 Q InteCap studied only five Motorola SEPs for 802.11,  
9 correct, sir?

10 A I believe that was their assumption in that analysis.

11 Q It's not something you mentioned on your direct, is it?

12 A I don't recall.

13 Q The Motorola 802.11 portfolio here contains many more  
14 patents, correct?

15 A Yes, it does.

16 Q There were 35 patents attached to Motorola's offer letter  
17 here, correct?

18 A I believe that's correct, yes.

19 Q And it's true that only one of the 802.11 patents at issue  
20 in this matter was considered by InteCap in 2003, correct?

21 A I have not made that calculation.

22 Q You don't dispute it, do you?

23 A I do not have a basis to dispute it, no.

24 Q That's not something you looked into when you were doing  
25 your analysis?

1 A I did not.

2 Q In formulating your opinions, you did nothing to assess  
3 the relative strength of the patents that InteCap considered,  
4 as compared to the patents at issue in this litigation, owned  
5 by Motorola, covering 802.11, correct?

6 A I did not. I did notice that there's only 11, and now 10,  
7 being asserted against the Xbox, so it didn't strike me as a  
8 huge difference.

9 Q You're engaging in patent-counting again, sir, are you?

10 A Well, in the absence of any particular information, of  
11 particular value of interoperability patents, that's not an  
12 unreasonable thing to do, and that's what we observe in the  
13 real world in all kinds of these pool arrangements.

14 Q And, sir, just to be clear, you did nothing to assess the  
15 relative strength of the patents that InteCap considered, as  
16 compared to the patents at issue in this litigation owned by  
17 Motorola, correct?

18 A I did not.

19 Q You didn't even look for evidence reflecting that  
20 comparative value, did you?

21 A I'm not aware of any.

22 Q Well, as an example, none of the five 802.11 patents  
23 considered by InteCap in 2003 had been asserted in  
24 litigation, correct?

25 A I have no personal knowledge of that.

1 Q You didn't look into that?

2 A I did not.

3 Q Two of the 802.11 patents in Motorola's current portfolio  
4 have been successfully asserted in litigation, haven't they?

5 A I do not know.

6 Q You don't know about the two Symbol patents that were  
7 found valid and infringed?

8 A The Symbol patents, yes, I was aware of that.

9 Q You were aware they were found valid and infringed?

10 A Yes.

11 Q And that the reasonable royalty rate in that case was  
12 6 percent of the net selling price?

13 A I'm aware of that, yes.

14 Q Of those two patents?

15 A I'm aware of that litigation.

16 Q Neither of those two patents was in the Motorola portfolio  
17 at the time of the 2003 InteCap study, over nine years ago,  
18 correct, sir?

19 A No. They were acquired in the Symbol acquisition.

20 Q And let's shift gears and talk about RAND rates and  
21 ranges. For a given set of SEPs, there is not a particular  
22 dollars and cents amount that you believe is RAND, but rather  
23 there's a range of rates that would be compliant with a RAND  
24 obligation, right?

25 A I think that's fair to say.

1 Q And the appropriate range is within the same order of  
2 magnitude as the point estimate, correct?

3 A Well, in my view the method of using a benchmark of a  
4 pool, because no pool is absolutely perfect, it involves some  
5 range either up or down from the central values --

6 THE COURT: Counsel, you used the phrase "point  
7 range", I don't know what that is.

8 Q Let me repeat my question, Your Honor, and make sure my  
9 record is clear. My question was, the appropriate range is  
10 within the same order of magnitude as the point estimate?

11 THE COURT: By "point estimate" you mean what?

12 MR. BATCHELDER: If you pick out a given dollar and  
13 cents estimate.

14 Q Sir, let me repeat the question, so we have a clear  
15 record. The appropriate range is within the same order of  
16 magnitude as the point estimate, correct?

17 A Yes. And what I meant, as I clarified, was that for  
18 example, the range around two-tenths of a cent for a  
19 RAND-compliant royalty for the H.264 standard patents would  
20 be a couple of tenths of a cent above or below that. And  
21 similarly within the range of the five-cent indicated  
22 RAND-compliant royalty for 802.11, it could be a few cents  
23 above or below.

24 Q That's assuming that your point estimate was the right  
25 one, correct?

1 A Well, given that my estimate indicates on a range like  
2 that, I believe that's the correct indication of a  
3 RAND-compliant range.

4 Q You've been a patent damages expert many, many times,  
5 correct?

6 A A fairly large number of times, yes.

7 Q And you agree that the assessment of RAND is not any  
8 direct part of damages case law, correct?

9 A I'm not aware in general patent damages case law of  
10 particular cases that read on that.

11 Q And you agree that, "The Entire Market Value Rule is part  
12 of damages case law, and the assessment of RAND is not part  
13 of any damages case law." Correct?

14 A Once again, I'm only speaking as an economist, not as a  
15 lawyer. But I'm typically asked to assess patent damages,  
16 not in a RAND context, just what would be the amount to  
17 compensate the patentholder for infringement.

18 Q Is that a yes?

19 A Maybe you could repeat the question. I thought it was an  
20 accurate response.

21 Q I was asking whether you agree with this statement, sir.  
22 "The Entire Market Value Rule is part of damages, patent  
23 damages case law, and the assessment of RAND is not any  
24 direct part of damages case law."

25 A Once again, I'm not speaking as a lawyer, but the EMVR I'm



1 familiar with as a damages expert, at least, I've been asked  
2 to make certain assumptions by attorneys, knowledgeable in  
3 that area. And with respect to RAND I'm not aware of  
4 particular case law instructions about taking that RAND  
5 obligation into account.

6 Q True or false, sir. A royalty rate can be RAND even if  
7 not calculated pursuant to the Entire Market Value Rule?

8 A It could be, sure.

9 Q Now, in the real world it can be expensive to audit  
10 compliance license agreements, correct?

11 A In the real world, yes, it generally is.

12 Q For both the licensor and licensee, correct?

13 A Correct.

14 Q And to reduce those costs, SEP licensing parties often  
15 choose a royalty base that's relatively inexpensive to  
16 measure, correct?

17 A That can sometimes be a business consideration for that  
18 choice, yes.

19 Q And a per-unit royalty is sometimes chosen for that  
20 reason, correct?

21 A It is particularly simple, yes.

22 Q And the SEP license is sometimes set for unit royalties,  
23 even though the licensed patents may add significant value to  
24 some units, but far less value to others, correct?

25 A We observe empirically that unit pricing for complex

1 consumer electronics components is almost always the way it's  
2 chosen to go.

3 Q But that's a reasonable thing to do in the real world  
4 because businesses need to deal with transaction costs,  
5 correct?

6 A That is part of the consideration, certainly.

7 Q And it's reasonable even though the per-unit royalty  
8 structure is not consistent with how a "reasonable royalty,"  
9 would be calculated, using the apportionment requirements  
10 with the Entire Market Value Rule of patent damages case law,  
11 correct?

12 A I'm sorry, sir. Could you repeat that question?

13 Q It's reasonable to use a per-unit royalty structure, even  
14 though such a structure is not consistent with how a  
15 reasonable royalty would be calculated using the  
16 apportionment requirements with the Entire Market Value Rule  
17 of patent damages case law, correct?

18 A Would it be possible to structure a royalty that way even  
19 if there were some other different determination of a  
20 reasonable royalty rate, apart from transactions costs? Am I  
21 understanding you correctly?

22 Q Let me withdraw the question and I'll move on. The  
23 per-unit royalty structure is reasonable, even though it  
24 "Doesn't have anything to do with patent damages case law and  
25 the Entire Market Value Rule." Do you agree with that?

1 A That's possible, yes.

2 Q And your royalty rate calculation here, based on patent  
3 pools, your calculated rate does not take into account the  
4 extent to which Microsoft's products use Motorola's 802.11  
5 and H.264 standard essential patents, correct?

6 A Well, I'm simply observing what the contributors of  
7 technology freely agreed to in the pool arrangements in terms  
8 of the way they offered to license their property. They  
9 considered it to be fair and reasonable. Google has deemed  
10 it to be fair and reasonable. That's what we observe in the  
11 world, without anybody else's judgment.

12 Q Is that a yes?

13 A I think it was an accurate answer.

14 Q I want to make sure we have a clear record, sir. Your  
15 royalty rate calculation here, based on patent pools, does  
16 not take into account the extent to which Microsoft's  
17 products use Motorola's 802.11 and H.264 standard essential  
18 patents correct?

19 A Not correct.

20 Q If we could put up Dr. Lynde's deposition, page 83, line  
21 18, through 84, line 5.

22 "Question: Did you consider, in your analysis, the  
23 extent to which Microsoft uses the 802.11 and H.264  
24 technologies in its products?

25 "Answer: As I believe I mentioned earlier, I was aware

1 from my discussions with at least the technical experts  
2 retained by Microsoft, of which Microsoft products use the  
3 Motorola -- used the standards that are in question here, and  
4 which portion of those might have used the technologies  
5 described in the Motorola patents. But as I also said, I did  
6 not use that as a particular component of my economic  
7 conclusion about a RAND rate." Have I read correctly, sir?

8 A Yes, that's true. That's correct. And that's consistent  
9 with what I've said.

10 Q We were just talking about per-unit royalties. But some  
11 SEP licensing parties also use net selling price as a royalty  
12 base, because that too is relatively inexpensive to audit,  
13 correct?

14 A It is more expensive to audit, but/for licensing complex  
15 consumer devices, they're almost all per-unit royalties, as  
16 far as I know, to avoid the danger of applying a royalty to  
17 other components which have nothing to do with the patent, or  
18 standard-related subject matter.

19 Q Was your answer just now about pools?

20 A No.

21 Q Okay. I just want to make sure I have a clear record on  
22 this. Licensing agreements often base the royalty on the  
23 sales or profits of the licensed products, correct, sir?

24 A In my experience for -- well, let me see if I understand  
25 the context of your question. Just generally, any license

1 for anything?

2 Q Licensing generally.

3 A Well, it depends entirely on the circumstances. But if  
4 it's a complex consumer device that has many components and  
5 there is a danger of the royalty to be applied to subject  
6 matter that has nothing to do with the patent in question,  
7 that is not generally the way it's done, in my experience.

8 Q Let's do it this way, sir. Let me read you a quote from  
9 the famous *Lucent* case. You've read that case, *Lucent v.*  
10 *Gateway* from the Federal Circuit?

11 A I've read portions of it, certainly.

12 Q Let me read you a quote: "Sophisticated parties routinely  
13 enter into license agreements that base the value of the  
14 patented inventions as a percentage of the commercial  
15 product's sales price." And you agree with that, right?

16 A It happens, certainly.

17 Q This opinion used the word "routinely." Is that a fair  
18 description?

19 A I don't have any empirical basis to know how routine that  
20 is.

21 Q It's possible to structure a RAND license agreement where  
22 the royalty is tied to the selling price of a product, rather  
23 than a per-unit basis, or some other basis, correct, sir?

24 A It's possible . But the further downstream you go in  
25 terms of charging a percentage royalty, the more danger there

1 is for charging royalty inappropriately on subject matter  
2 which has nothing to do with the patent, or the standard  
3 that's being licensed. And, therefore, it is not what would  
4 commonly be done. You try to go to the smallest saleable  
5 unit.

6 Q Sir, isn't it true SSOs themselves endorse making RAND  
7 commitments based on product price of the royalty base?

8 A Not generally for the complex consumer, for the very  
9 reasons I just said. There's too much danger of charging a  
10 royalty inappropriately on non-patent, or --

11 Q And -- I'm sorry, sir.

12 A It is possible for certain fields of use, like content, to  
13 charge a percentage value on the content. Because, of  
14 course, the content of a TV show or music clip is that whole  
15 clip.

16 THE COURT: How much longer will you be?

17 MR. BATCHELDER: Probably another five minutes, Your  
18 Honor.

19 THE COURT: If you promise, then we'll run right  
20 through.

21 MR. BATCHELDER: I'll do my very best.

22 Q Could we put up 3394, please? If we put up the page, the  
23 next page. Could you blow up the top, please? And you'll  
24 see, sir, at the top here -- by the way, let's go back to the  
25 first page . You recognize this document as an IEEE form

1 LOA, sir?

2 A Yes, I've seen these before.

3 Q Now, let's go back to that second page. Can we blow up  
4 the top, please? You'll see there it says, "The submitter  
5 will grant a license under reasonable rates to an  
6 unrestricted number of applicants on a worldwide basis with  
7 reasonable terms and conditions that are demonstrably free of  
8 unfair discrimination." And one of the bases that is  
9 specified in this IEEE LOA, is percent of product price.

10 Correct, sir?

11 A That is what it says, yes.

12 Q All right, sir.

13 Now, before this litigation you've testified on patent  
14 pools and SEPs only once before, when you were working on  
15 behalf of Fujitsu, correct?

16 A Yes.

17 Q And Fujitsu's patent at issue there was an SEP for the  
18 802.11 standard, wasn't it?

19 A That was my understanding, yes.

20 Q Fujitsu was the plaintiff, correct?

21 A It was.

22 Q Fujitsu joined the 802.11 patent pool, correct?

23 A It had.

24 Q But your testimony on behalf of Fujitsu, as a plaintiff,  
25 was that the reasonable royalty owed to Fujitsu for

1 infringement in that matter exceeded the royalty rate  
2 associated with the Via 802.11 patent pool, correct, sir?

3 A That's right, because it was not constrained by the RAND  
4 commitment, which was embodied in the pool participation.  
5 Fujitsu was part of the pool.

6 Q So the reasonable royalty is higher than the pool royalty  
7 in your opinion that you conveyed to the jury in that matter,  
8 right, sir?

9 A For a straight patent infringement matter, unencumbered by  
10 RAND, that's what an economist would expect.

11 Q How much higher was it, sir?

12 A I don't recall exactly. It was cents per unit, but I  
13 don't recall.

14 Q Could it have been 100 percent greater?

15 A I don't recall the percentage difference.

16 Q Could it have been 500 percent greater?

17 A I don't recall.

18 MR. BATCHELDER: No further questions, Your Honor.  
19 Thank you.

20 THE COURT: Thank you, counsel. Sit down. We're  
21 taking our break. Ladies and gentlemen, we'll be in recess  
22 until 3:20.

23 (The proceedings recessed.)

24

25 MR. BATCHELDER: Your Honor, I apologize. But the



1 last document that I raised with the witness was  
2 Exhibit 3394, that was the IEEE letter of assurance. I  
3 neglected to move that into evidence. I will do that now.

4 THE COURT: Any objection?

5 MR. PRITIKIN: No.

6 THE COURT: It is admitted.

7 (3394 admitted.)

8 By Mr. Pritikin:

9 Q Dr. Lynde, I just have a couple of questions for you.  
10 Let's start with InteCap. You were asked some questions  
11 about the Motorola patents that were considered by InteCap in  
12 its analysis. Do you recall those questions?

13 A Yes, I do.

14 Q And do you recall some questions about how InteCap did not  
15 consider two patents that were later acquired through Symbol,  
16 and that were the subject of some jury verdict?

17 A I do remember that question.

18 Q Now, by the time that Motorola sent its letter to  
19 Microsoft in October of 2010, had those two Symbol patents  
20 expired?

21 A I'm afraid I am relying on memory, but I believe that is  
22 the case.

23 Q Now, you told us that InteCap had assumed that Motorola  
24 had 25 percent of all the 802.11 patents; is that right?

25 A That was implicit in the method they applied. It was

1 really just an arbitrary figure they put in for an  
2 adjustment, which they acknowledge something needed to be  
3 done.

4 Q Now, regardless of whether Motorola had a handful of  
5 additional patents besides those considered by InteCap, do  
6 you think with that 25 percent implicit assumption, InteCap  
7 shortchanged Motorola?

8 A No, on the contrary, it greatly exaggerates any likely  
9 effect from the size of the portfolio, then or now.

10 Q Let's talk about transaction costs. Do you recall you  
11 were asked a number of questions about that?

12 A I do.

13 Q Now, just suppose that a company in bilateral negotiations  
14 insists on an unreasonable royalty, and runs up the  
15 transaction costs, is that something you think they should be  
16 compensated for?

17 A Gosh. I want to offer an opinion as an economist. That  
18 ability to impose a cost through something which doesn't  
19 comply with, say, a promise to be reasonable seems to me  
20 shouldn't be borne by the other party.

21 Q And could legitimate transaction costs explain the  
22 difference between your proposed RAND royalty and the two and  
23 a quarter percent of the end product that has been suggested  
24 by Motorola?

25 A No, not by any stretch of the imagination.

1 Q One last topic, royalty stacking. Now, if other companies  
2 having standard-essential patents charged what Motorola is  
3 asking for in this case, two and a quarter percent of the  
4 end-product price, would there, in your opinion, be a serious  
5 stacking problem?

6 A Absolutely. If everyone wanted that same deal, it would  
7 quickly make the end-product price untenable commercially.

8 Q And based on your analysis in this case, do you believe  
9 that Motorola is engaged in hold-up?

10 A I do.

11 MR. PRITIKIN: Nothing further, your Honor.

12 MR. BATCHELDER: No questions, your Honor.

13 THE COURT: You may step down. Thank you. Motorola  
14 will call its next witness -- excuse me. It is still  
15 Microsoft.

16 MS. HIGGINS: Your Honor, Motorola would call as --

17 THE COURT: I need to get Microsoft to say they are  
18 done. Mr. Harrigan.

19 MR. HARRIGAN: Yes, your Honor. Except for finishing  
20 up the Orchard testimony, and calling Mr. Dailey when he  
21 appears on behalf of Motorola as part of our case, we have  
22 completed our witnesses. And that raises a question, because  
23 where we stand right now, as we understand it, is that  
24 Motorola has twelve remaining witnesses, not counting the two  
25 that we are going to be dealing with this afternoon, I guess.

1 And I want the court to know that we are planning to curtail  
2 our cross so that we end up with an hour and a half for  
3 rebuttal. When you look at the two days that we have next  
4 week, and subtract an hour and a half for rebuttal, we were  
5 wondering whether Motorola is really going to be able to get  
6 through twelve witnesses. If not, we would love to know  
7 which ones they are going to eliminate.

8 THE COURT: Mr. Jenner, do you want to address that  
9 as opposed to passing that one off to someone else?

10 MR. JENNER: The honest answer to your question, your  
11 Honor, is no, but I will. We certainly appreciate that we  
12 are under some time pressure, and we are going to have to  
13 conjure with that over the weekend. Mr. Pepe has already  
14 provided what we think is the tentative list for Monday. I  
15 will make no bones about the fact that we may be having to  
16 curtail witnesses. They have the tentative list for Monday.

17 In accordance with the schedule the court has required, we  
18 will give them, no later than Sunday 4:00, the final list for  
19 Monday. We will continue to comply with that rule. But I am  
20 not in a position to tell him who, if at all, we will be  
21 unable to call. I just can't do that at this point.

22 MR. HARRIGAN: Your Honor, my intent was not to ask  
23 for the answer this instant. But I do think that if four or  
24 five witnesses are going to be eliminated, there should be a  
25 deadline by which we know who they are.

1 THE COURT: Let's assume you all take the night off  
2 and you reconsider this all tomorrow. Let's say by 4:30 on  
3 Saturday you will talk to them and advise them which  
4 witnesses you will be calling on a more final basis for  
5 Monday, just for Monday.

6 MR. JENNER: For Monday. Your Honor, I should point  
7 out we have had people traveling because of deaths in the  
8 family, people are coming back, Mr. Dailey we expected to be  
9 here. We have had lawyers and witnesses that have had  
10 unexpected health problems, including death in the family.  
11 We are going to have to factor that in as well. We will  
12 advise them by 4:30 Saturday afternoon what the order is for  
13 Monday.

14 THE COURT: That would be fine.

15 MR. HARRIGAN: May I ask for one other piece of  
16 information perhaps on Sunday? And that is, I would assume  
17 that by Sunday they will know if there are some witnesses  
18 that are not going to show up, be testifying at all, on  
19 Monday or Tuesday. If that is true, then I would request  
20 that we find out who they are on Sunday sometime, so that we  
21 are not trying to -- Because we obviously have to prepare to  
22 cross-examine twelve witnesses in two days. And I don't  
23 think that is going to happen.

24 MR. JENNER: Part of the game, your Honor, is we are  
25 going to be trying to evaluate, including when we see what

1 happens Monday, what it is we can accomplish on Tuesday. I  
2 am well aware of the reports in the newspapers about, I guess  
3 it was a Samsung/Apple trial before Judge Koh, where they  
4 found themselves with 70 witnesses and four and a half  
5 minutes or something like that, and people were running  
6 around like chickens with their heads cut off. We will be  
7 evaluating Monday. We will tell them what we can tell them  
8 as soon as we can tell them.

9 THE COURT: Let's use our time wisely. I would  
10 expect if you know at some point that someone is out, it will  
11 be communicated without any games played.

12 MR. JENNER: Yes.

13 THE COURT: You are all very professional lawyers. I  
14 truly believe in the American College Standards of  
15 Professionalism. That's how you guys behave, and I  
16 appreciate that. And I'm sure as part of that, when you know  
17 they will know. Let's leave it at that, other than the 4:30  
18 on Saturday who you are going to have on Monday.

19 MR. JENNER: Good.

20 MR. HARRIGAN: Thank you, your Honor. You can call  
21 your first witness.

22 MR. JENNER: Your Honor, I would like to interject.  
23 I did reserve the opportunity to deliver a very brief opening  
24 on behalf of Motorola. I would like to take a few minutes to  
25 do that now. Not that your Honor is unaware of what this

1 case is about.

2 Nevertheless, while it may not seem like it, we are  
3 halfway through this process of determining what a RAND rate  
4 or range of rates should be for a license to Microsoft under  
5 Motorola's standards-essential patents.

6 Plainly, I would submit, Motorola and Microsoft are a  
7 couple of ships passing in the night. The evidence shows  
8 Microsoft wants, in our submission, the low rates of patent  
9 pools rather than the rates that the parties would have  
10 agreed to had Microsoft been willing to negotiate.

11 In order to justify the low pool rates, Microsoft's  
12 evidence promotes a so-called multilateral ex ante approach  
13 to RAND licensing, in which many patentholders and  
14 implementers supposedly participate in a negotiation. Of  
15 course, no such multilateral ex ante negotiation happens in  
16 the real world. But, nevertheless, Microsoft's witnesses  
17 consider this to be a proxy for relying on pools. And that's  
18 what the evidence is showing.

19 The fact remains that the pools are neither fully  
20 multilateral, nor ex ante, and they don't accomplish the  
21 purpose of identifying ex ante incremental patent value, much  
22 less what would happen in the real world negotiation that we  
23 submit our evidence will show.

24 Patent pools are voluntary organizations that generally  
25 divide royalties equally among the companies that choose to

1 join on a patent counting basis. And one of our witnesses  
2 will address that.

3 Patent pools make no attempts to determine the value of  
4 the individual patents contributed to the pool. Every  
5 patent, whether a fundamental contribution, or the well-known  
6 Bozo tweak, gets the same rate, deterring those who believe  
7 they have strong patents from joining the pool.

8 If pool rates were used to impose artificially low rates  
9 on all standards-essential patents, regardless of whether the  
10 patentholders wanted to join a pool, this would inevitably  
11 discourage patentholders from making substantial technology  
12 investments, from joining and contributing to the standards  
13 of the future. This, in turn, would weaken standards of the  
14 future to the detriment of every sector in these industries,  
15 including consumers. That, the evidence will show, is an  
16 important policy consideration that we submit the court  
17 should take into account.

18 Indeed, the evidence here shows that important patentees,  
19 like IBM, Nokia and Thompson, and Motorola for that matter,  
20 did indeed reject the MPEG LA patent pool for H.264, and  
21 many, many more patentholders, including Microsoft itself,  
22 avoided the Via pool.

23 So establishing a method of determining RAND rates based  
24 on patent pools would call into question the validity and  
25 stability of many RAND licenses entered into in recent years



1 in reliance on good-faith bilateral negotiations rather than  
2 low pool rates. So there is a backward effect as well as a  
3 forward effect at stake here.

4 Motorola, in contrast, will apply the expectation of the  
5 standards organizations that RAND rates would typically be  
6 determined by good-faith bilateral negotiations between a  
7 patentholder and an implementer who wants a license. The  
8 evidence will show that this is how the real world works, and  
9 even Microsoft witnesses have already conceded that RAND  
10 license terms are typically arrived at through bilateral  
11 negotiations.

12 Motorola, therefore, seeks to simulate a negotiation that  
13 would have taken place in the real world in October 2010 if  
14 Microsoft had negotiated with Motorola instead of commencing  
15 litigation first.

16 That negotiation, we submit, would be similar to the  
17 well-known hypothetical negotiation like that of the Georgia  
18 Pacific case.

19 During such a bilateral negotiation Motorola and Microsoft  
20 would have considered all applicable factors, including the  
21 relative value of the patents that each has to offer to the  
22 other in order to arrive at RAND terms.

23 Motorola's witnesses will provide the basis for the court  
24 to consider this hypothetical bilateral negotiation.

25 Dr. Richard Holleman, a former long-term executive of the

1 IEEE, will provide relevant background regarding the meaning  
2 of the RAND commitment and the expectation of SSOs. He will  
3 confirm that the standards organizations have no  
4 predetermined meaning of RAND, and leave the RAND negotiation  
5 to the involved parties.

6 Dr. Richard Schmalensee, who is an economist from MIT,  
7 will explain the proper framework for the RAND negotiation,  
8 noting the theoretical but impractical concepts discussed in  
9 the academic literature, and then confirming that the  
10 hypothetical bilateral negotiation that would have taken  
11 place between the parties is the logical way to reach a  
12 practical real world solution.

13 Roger Smith, former head of licensing at IBM, another  
14 great technology company, will explain why patent pools are  
15 not a fair or useful tool for determining a RAND rate for a  
16 bilateral licensing negotiation between two companies.

17 As to the technical contributions the parties bring to the  
18 table, Motorola's Ajay Luthra, who participated in the  
19 development of the H.264 standard, and is connected with many  
20 Motorola patents covering the standard, will testify  
21 regarding Motorola's patent contributions to the H.264  
22 standard.

23 Motorola's patent experts will then describe the value  
24 provided by Motorola's patents, as well as the comparative  
25 value of patents that Microsoft would have brought to the

1 bilateral negotiating table.

2 Dr. Tim Williams will testify as to the breadth and  
3 strength of Motorola's coverage of the 802.11 standard,  
4 compared with Microsoft's few patents.

5 Dr. Tim Drabik will explain the coverage of Motorola's  
6 H.264 patents, compared with the coverage of Microsoft's  
7 patents.

8 Mr. Michael Dansky, an expert in technology valuation,  
9 will then explain the importance of Motorola's patents to  
10 Microsoft's product line, showing why Microsoft would have  
11 been willing to pay a realistic royalty for access to  
12 Motorola's standard-essential portfolios.

13 Similarly, Dr. Ramanathan Sukumar will describe a survey  
14 of relevant users that demonstrates the value of features  
15 covered by Motorola's patents. And I apologize to him for my  
16 perpetual inability to pronounce his name properly.

17 Kirk Dailey, former vice-president of intellectual  
18 property at Motorola Mobility, and responsible for years of  
19 standards-essential patent licensing negotiations will  
20 explain Motorola's long history of licensing and describe  
21 relevant Motorola patent licenses for this technology and  
22 these patents.

23 And Motorola's licensing expert, Charles Donohoe, who  
24 spent 20 years as head of licensing at Samsung, another  
25 considerable technology company, and negotiated many RAND

1 licenses, will explain how a hypothetical bilateral  
2 negotiation would have been conducted arriving at proposed  
3 RAND rates for the Motorola standards-essential patents  
4 portfolios.

5 This array of witnesses, in large part mirroring a  
6 licensing team that we submit would be the real world,  
7 simulates what happens in licensing negotiations contemplated  
8 by SSOs, and embraced by industry, as opposed to the narrow  
9 realm and applicability of patent pools that set depressed  
10 rates. These witnesses will explain what happens in  
11 negotiations in the real world, rather than in the realm of  
12 economic theory.

13 A licensing team like this includes professionals who  
14 evaluate the patented technology, and financial professionals  
15 who value the technology as applied to the adversaries'  
16 products. Lead negotiators then bargain for months with  
17 their adversaries to arrive at a solution acceptable to both  
18 sides.

19 Motorola will explain these relevant aspects of the  
20 simulated bilateral negotiation to arrive at a meaningful  
21 license rate, fair to both sides, but consistent with  
22 Motorola's other licenses for these technologies, and what  
23 would have happened in the real world.

24 With that, your Honor, I would like to -- unless you have  
25 any questions, I would like to proceed with our first

1 witness.

2 THE COURT: The only question I would have is more  
3 something that I would be interested in. And that is how --  
4 I understand how as part of bilateral negotiations there  
5 would be cross licensing. But given that we are not in  
6 bilateral negotiations, we are in hypothetical bilateral  
7 negotiations, what authority do I have to assume that  
8 Microsoft would have cross licensed? So as your witnesses  
9 are presenting their testimony, they might keep that in mind.

10 MR. JENNER: All right. Fine. Thank you.

11 THE COURT: Thank you.

12 MR. JENNER: With that, Ms. Higgins, who is known to  
13 the court, will now for real call our first witness.

14 MS. HIGGINS: Your Honor, Motorola calls Dr. Ajay  
15 Luthra.

16 MR. JENNER: I should add, your Honor, just because  
17 of these exigencies we have all been speaking about, I have  
18 tried to characterize the witnesses in a progression having  
19 to do with negotiations. We are unable to do that here in  
20 the courtroom. We will call them when we can.

21 Whereupon,

22 AJAY LUTHRA

23 called as a witness, having been first duly sworn, was  
24 examined and testified as follows:

25 THE CLERK: Will you state your full name for the

1 record and spell your last name, please?

2 THE WITNESS: Ajay Luthra, L-U-T-H-R-A.

3 THE COURT: You may inquire.

4 DIRECT EXAMINATION

5 BY MS. HIGGINS:

6 Q Good afternoon, Dr. Luthra.

7 A Good afternoon.

8 Q Would you please tell us briefly about your education?

9 A I have bachelor's in engineering from BITS, India,  
10 master's in electrical engineering from New Delhi, and Ph.D.  
11 in systems engineering from University of Pennsylvania,  
12 Philadelphia.

13 Q And who do you currently work for?

14 A Motorola Mobility.

15 Q How long have you worked at Motorola?

16 A If you count the years I worked with GI, which was  
17 acquired by Motorola, about 17 years.

18 Q And what is your current position at Motorola?

19 A I am vice-president and Motorola fellow.

20 Q And what are your duties in those positions?

21 A I manage a group of engineers in advanced technology.  
22 Their activities are involving digital video processing,  
23 digital video compression, next generation system  
24 architecture design.

25 Q Have you been involved in standards development?

1 A Yes, I have been involved in MPEG-2, MPEG-4 part two,  
2 H.264, and more recently HEVC, the next generation video  
3 coding standard. I have been one of the co-chairs of H.264.

4 Q Dr. Luthra, I'm not sure if your mic is on.

5 THE COURT: Maybe I could suggest that you get closer  
6 to the mic.

7 By Ms. Higgins:

8 Q Please show Exhibit 5000. Dr. Luthra, do you recognize  
9 this as a list of Motorola's U.S. patents that relate to the  
10 H.264 standard?

11 A Yes.

12 Q And there are a number of patent families there. Are you  
13 familiar with those?

14 A Yes, the Krause, Wu, Eifrig, MBAFF and PAFF and scan  
15 family.

16 Q For the record, I am just going to quickly read in those  
17 patent numbers. Those are Exhibit 270, Exhibit 283,  
18 Exhibit 268. And then for the MBAFF family, Exhibits 271  
19 through 278; the PAFF family, Exhibits 280 through 282; and  
20 the scan family, Exhibits 265 through 266. Do you see all of  
21 those?

22 A Yes.

23 MS. HIGGINS: Motorola offers Exhibit 5000.

24 MR. CEDEROTH: Your Honor, it is a demonstrative.

25 MS. HIGGINS: That's fine, your Honor. I offer it as

1 a demonstrative.

2 MR. CEDEROTH: No objection as a demonstrative.

3 THE COURT: As a demonstrative. We have not been  
4 admitting demonstrative exhibits, counsel.

5 MS. HIGGINS: Okay.

6 By Ms. Higgins:

7 Q Please identify the patents on which you are a named  
8 inventor?

9 A I am one of the inventors on the MBAFF family, Eifrig  
10 family, PAFF family and scan family.

11 Q Now, turn to Exhibit 424 in your binder. Let me know when  
12 you have that in front of you, sir.

13 A Which number, please?

14 Q 424.

15 A Yes, I am there.

16 Q And it is also on your screen, too, so you can look there  
17 as well. Is this a paper relating to H.264 that you  
18 co-authored?

19 A Yes.

20 Q And if you would, please turn to Figure 18 on Page 574.

21 A Okay. I'm there.

22 Q What does Figure 18 show?

23 A It shows the performance of the reference code for H.264  
24 for low resolution sequences, CIF and QCIF resolutions.

25 Q Now, one of Microsoft's witnesses testified that most of



1 the coding efficiency gain of H.264 was in place as of TML-9.

2 Do you agree with that statement?

3 A No, that is not the full story.

4 Q Why?

5 A It does not show the performance for high resolution  
6 interlaced format video, which is a key format for standard  
7 definition and high definition TVs.

8 Q Now, does Motorola have any patented technology that is  
9 reflected in these graphs?

10 A Yes. I believe it has our older items, the Krause and Wu  
11 family. The technology described in there is in here.

12 Q Now, does Motorola have any patented H.264 technology that  
13 is not reflected in these graphs?

14 A Yes, our interlaced coding tools associated technology,  
15 the Eifrig family, the MBAFF family, PAFF family and scan  
16 family. The technology described there is not in here.

17 Q There has been a lot of testimony about interlaced video,  
18 so I want to ask you about that. Why did Motorola work to  
19 improve coding efficiency for interlaced video?

20 A One of the key business of Motorola is to distribute video  
21 associated with H.264 television applications. In digital  
22 television, for both standard definition and high definition,  
23 interlaced video format is a key format. And to be able to  
24 distribute those content very efficiently, our products and  
25 technology has to recognize the fact that the video is

1 captured in interlaced format.

2 Q Now, on your screen the next exhibit is Exhibit 2342. Do  
3 you recognize this as an MPEG submission numbered M26274, and  
4 dated July 2012?

5 A Yes, I do.

6 Q And what is the source of this document?

7 A This document was provided by the representatives from NBC  
8 Universal, HBO, CBS Corporation, Canadian Broadcasting  
9 Corporation, Motorola Mobility, Comcast and Cable Labs.

10 Q It says here, "To be presented by Ajay Luthra." Did you  
11 present this at the MPEG meeting in July 2012?

12 A Yes, I did.

13 Q And what did you present?

14 A I presented that this document describes the interlaced  
15 scan formats remain ubiquitous in the worldwide television  
16 ecosystem. Therefore, it is very important for a video  
17 coding system to design the technology that is very efficient  
18 in compressing interlaced video.

19 Q Now, let's turn to Page 2 of Exhibit 2342. In the last  
20 paragraph it states, "That in order to achieve commercial  
21 success, new compression standards should continue to  
22 efficiently support interlaced formats for the foreseeable  
23 future." Do you see that, Dr. Luthra?

24 A Yes, I do.

25 Q Why is support for interlaced formats necessary to achieve

1 commercial success?

2 A If you look further up in the document it states, "In  
3 current cable, satellite and telco distribution systems,  
4 1080i, 480i and 576i formats are in widespread use around the  
5 world."

6 Q Is there any benefit to distributing video in interlaced  
7 format?

8 A Yes, if the video is captured in interlaced format then it  
9 is more efficient to compress it in the native format using  
10 H.264.

11 Q Can problems arise if you convert interlaced video into  
12 progressive video before it is encoded?

13 A Yes, several problems and issues arise. The first one is  
14 that when you are converting from interlaced to progressive,  
15 you don't have the information associated with the lines that  
16 are present in progressive format. So you are estimating or  
17 guessing what those information is. In the process, if the  
18 distortion gets added, it will result in lowering coding  
19 efficiency.

20 Other issues that arise is that when you go from  
21 interlaced to progressive, for example going from 1080i to  
22 1080p, you double the pixel rate, so the entire processing  
23 system and everything has to work at twice the rate.

24 The third issue arises, that when you go from 1080i to  
25 1080p, for example, your bitrate is doubled. So now you have

1 to have two times the coding efficiency just to get back  
2 where you started from.

3 Q Just to be clear, 1080i, that is 1080 interlaced?

4 A 1080i is interlaced, 1080p is progressive.

5 Q Please refer to Exhibit 4007, which is a timeline that was  
6 presented by one of Microsoft's witnesses.

7 A I'm there.

8 Q Now, do you have a personal understanding of the  
9 development timeline of H.264?

10 A I do.

11 Q I am going to ask you to turn to the middle section of the  
12 timeline, where it states, "Test verification of about  
13 50 percent improvement." Do you see that?

14 A Yes, I do.

15 Q Did any of that improvement apply to interlaced video or  
16 Motorola's interlaced patents?

17 A No, that was done only for smaller resolution and  
18 progressive scan video only.

19 Q Now, there is also a third section of the timeline that  
20 begins in July 2001, and goes to the first few weeks of the  
21 standard in May 2003. Did the performance of the H.264  
22 standard improve during that time frame?

23 A Yes, it improved significantly for high resolution  
24 interlaced video formats.

25 Q And did Motorola contribute to those substantial

1 improvements?

2 A Yes, we actively participated in the committee, and we  
3 also submitted many documents, and our inventions are also  
4 described in the patent family that I talked about earlier.

5 Q Please show Exhibit 5001. What does this timeline show,  
6 Dr. Luthra?

7 A This timeline shows the significant improvement in coding  
8 efficiency for interlaced video. It shows that in July 2001  
9 Motorola identifies weakness in H.26L, for it to be not  
10 efficient for interlaced video.

11 Next, it shows in December 2001 Motorola submitted the  
12 proposal with a prediction motion vector.

13 Next, was Motorola MBAFF and PAFF, and after that a  
14 Motorola scan proposal in May of 2002.

15 Q Now, can you explain briefly how Motorola developed the  
16 technology in these proposals?

17 A Yes. First of all, we worked very long and hard. We had  
18 lots of discussions, and based upon that we developed some  
19 ideas. Then we simulated that in the software, looked at the  
20 tests, analyzed them thoroughly. Based upon that we had  
21 further discussion, and decided if we need to have some other  
22 ideas also implemented. If they work, we did that. And once  
23 we were satisfied, we provided the description of our  
24 proposals to JVT and the results of our simulation.

25 Q Now, at the end there, the results of your simulations,

1 those tests, what was the benchmark against which you were  
2 comparing?

3 A Generally the benchmark was the current state of the  
4 standard at that stage.

5 Q And why did you use the existing standard as the  
6 benchmark?

7 A A key goal of the standard was to improve the coding  
8 efficiency. And for the committee to be able to understand  
9 whether to adopt a proposal or not, a key criteria was  
10 whether it improves the coding efficient or not. So that's  
11 why generally we use the current state of the standard, so we  
12 could show that a given proposal improved the coding  
13 efficiency in comparison to that.

14 MS. HIGGINS: Before I move on to the next subject, I  
15 would like to offer Exhibit 2342, which is an MPEG  
16 submission.

17 MR. CEDEROTH: No objection.

18 THE COURT: It is admitted.

19 (2342 admitted.)

20 By Ms. Higgins:

21 Q Please refer to Exhibit 2271, which is an MPEG submission  
22 numbered M7227, entitled "Performance of MPEG-4 Profiles Used  
23 for Streaming Video and Comparison with H.26L." Are you a  
24 co-author on this document, dated July 2001?

25 A Yes, I am.

1 Q Can you explain briefly what you discussed in this paper?

2 A In this paper we are comparing the performance of the  
3 various video coding standards. And one of the key  
4 conclusions here was that the performance of H.26L was not  
5 any better than the existing standard, MPEG-4 part two. And  
6 we also concluded it showed evidence that if new tools are  
7 added which are designed to improve the coding efficiency for  
8 interlaced format, then it can improve the performance of  
9 H.26L.

10 Q Now, please refer to Exhibit 423, which is Motorola's  
11 VCEG-037 submission.

12 A Okay.

13 Q Are you a co-author of this document?

14 A Yes, I am.

15 MS. HIGGINS: Motorola offers Exhibit 423.

16 MR. CEDEROTH: No objection.

17 By Ms. Higgins:

18 Q What is discussed --

19 THE COURT: Counsel, you need to wait until I admit  
20 it. It is admitted.

21 MS. HIGGINS: Thank you.

22 (423 admitted.)

23 By Ms. Higgins:

24 Q What is discussed in this document, Dr. Luthra?

25 A It describes interlaced coding tools that can be added to

1 H.26L video coding as proposed by Motorola.

2 Q Please turn to Figure 9 on the bottom of Page 8 of  
3 Exhibit 423.

4 A Figure --

5 Q Figure 9 on the bottom of Page 8.

6 A Okay. I am there.

7 Q Please explain what this figure shows.

8 A It shows that there is a current regional pixel denoted by  
9 E, and it has four neighboring regions, denoted by A, B, C  
10 and D. And for compressing the current region E one can use  
11 the neighboring regions A, B, C and D to do the video  
12 compression, and do, for example, motion vector prediction,  
13 PMV. And these regions or these blocks could be field or  
14 frame.

15 Q Was Motorola granted any patents that relate to prediction  
16 motion vector technology?

17 A Yes. That technology is described in the Eifrig patent.

18 Q Please turn to Figure 7 of the Eifrig patent, which is  
19 Exhibit 268.

20 A Okay.

21 Q Please explain what is shown in Figure 7 of the Eifrig  
22 patent?

23 A It shows that the current block number 700 is being  
24 compressed. It has three neighboring blocks, 712, 722, 732.  
25 They are used to calculate the prediction motion vector. The



1 current block 700 is a field mode.

2 Q Now, is there any benefit to using these three neighboring  
3 blocks, MV1, MV2 and MV3?

4 A Yes, they provide the widest range of information about  
5 neighborhood, and it allows you to compress 700 block video,  
6 which is MV1, MV2, by having (inaudible) characteristics  
7 about neighboring area.

8 Q Was Motorola's patented PMV technology adopted into the  
9 H.264 standard?

10 A Yes, it was.

11 Q Please turn to Exhibit 610. What is Exhibit 610?

12 A It is an H.264 standard as of May 2003.

13 MS. HIGGINS: Motorola offers Exhibit 610.

14 THE COURT: Any objection?

15 MR. CEDEROTH: No objection.

16 THE COURT: The exhibit is admitted.

17 (610 admitted.)

18 By Ms. Higgins:

19 Q Please turn to 610 at Page 21. What is shown in  
20 Figure 6-9 at the top of the page?

21 A It shows that there is a current macroblock or partition  
22 or block being compressed. Its neighboring blocks are A, B,  
23 C and D. Those blocks can be used to do various video  
24 processing, for example, prediction of motion vector.

25 Q Is there a reason for using blocks A, B, C instead of

1 blocks A, B, D?

2 A Yes. A, B, C gives better information about the  
3 surrounding area, and it covers all the neighborhood. If you  
4 do A, B, D, you are constrained only to the -- more off to  
5 the left side.

6 Q Does that have any effect on the coding efficiency?

7 A Yes. The better information you have about surrounding  
8 area, the better possibility you have of predicting motion  
9 vector, which means you are required less number of bits to  
10 compress the motion vector. And that will improve the coding  
11 efficiency.

12 Q Let's turn back to Exhibit 423, which is VCEG037. I would  
13 like to direct you to a different part of this contribution,  
14 Page 9 of Exhibit 423. It refers there to testing. What is  
15 Motorola testing there?

16 A Motorola is testing various different coding tools  
17 designed for compressing interlaced video.

18 Q Did the tests that were conducted here include tests on  
19 single macroblock adaptive frame/field coding?

20 A Yes, they did.

21 Q Please turn to Exhibit 3382, which is JVT-B002D2.

22 A Okay.

23 Q Who authored this document?

24 A This is co-authored by Gary Sullivan, Thomas Wiegand and  
25 myself.

1 MS. HIGGINS: Motorola offers Exhibit 3382.

2 MR. CEDEROTH: I am trying to see what it is, your  
3 Honor. No objection, your Honor.

4 THE COURT: It is admitted.

5 (3382 admitted.)

6 By Ms. Higgins:

7 Q Page 7 of the exhibit references VCEG-037. Let me know  
8 when you have that in front of you.

9 A I do.

10 Q What did the JVT conclude regarding Motorola's single  
11 macroblock AFF test results in VCEG-037?

12 A They were not satisfied with the performance, and they  
13 noticed MB adaptive, which is for single macroblock, needs  
14 more work.

15 Q Now, after Motorola performed this testing on single  
16 macroblock AFF, what further work did Motorola do?

17 A We worked in two areas. We first improved the performance  
18 of picture AFF. But we were also surprised by the  
19 performance of single MBAFF was not very good. So after much  
20 review and thinking, we realized that the key reason the  
21 performance of MBAFF for single macroblock was not efficient  
22 was because when you split them into two regions you lose the  
23 capability to do 16-by-16 and 8-by-16 base processing, which  
24 is very important when you are compressing high resolution  
25 video that you see in standard definition and high

1 definition. So it was very important to have the capability  
2 where you can include those regions as well. Otherwise, you  
3 are kind of tying the hands behind the back for field coding.  
4 To solve that problem we invented new approach in which we  
5 did the AFF at macroblock pair level.

6 MS. HIGGINS: Your Honor, may I have permission to  
7 put up a board?

8 THE COURT: Yes.

9 MS. HIGGINS: It is also Exhibit 3277 in the binder.  
10 By Ms. Higgins:

11 Q Dr. Luthra, you had mentioned macroblock pair adaptive  
12 frame/field coding and picture level adaptive frame/field  
13 coding. Let's discuss macroblock pair adaptive frame/field  
14 coding first. Now, does Exhibit 3277 contain information  
15 from the Joint Video Team submissions made by Motorola  
16 relating to macroblock pair AFF?

17 A Yes, it does.

18 MR. CEDEROTH: Your Honor, I'm not sure we are  
19 talking about the right exhibit or we are all talking about  
20 the same exhibit. This is 3277?

21 MS. HIGGINS: Yes, it is.

22 MR. CEDEROTH: Not 3276?

23 MS. HIGGINS: It is 3277.

24 MR. CEDEROTH: Thank you, your Honor.

25 By Ms. Higgins:

1 Q Now, the first entry on the timeline refers to  
2 Exhibit 2209, which is Motorola's JVT-B106 submission. Did  
3 you co-author that document?

4 A Yes, I did.

5 Q And what did Motorola propose in Exhibit 2209?

6 A In this proposal we were proposing to break the picture  
7 into a collection of super MBs, which was two macroblocks.  
8 That nomenclature was later changed to be called MB pair,  
9 macroblock pair. We have too many acronyms, I guess.

10 Q Now, both in the document and on the timeline, is there a  
11 picture of the macroblock pair, which is Figure 4 of the  
12 document?

13 A Figure 4 of the document, yes.

14 Q Now, please turn to Figure 4 on Page 10 of Exhibit 2209 --  
15 excuse me, Figure 11.

16 A Okay.

17 Q What does Figure 11 show?

18 A Figure 11 compares, among other things, the performance of  
19 picture level AFF versus MB pair level AFF.

20 Q Now, these graphs can be hard to read to a lot of us in  
21 the room. So I was wondering if you can explain, where is  
22 the macroblock pair AFF curve in the graph?

23 A The macroblock pair AFF is the black line with the X marks  
24 on it. That is the top most curve. Picture level AFF is the  
25 yellow line with the triangles on it.

1 Q Which is better, being on the top or being on the bottom  
2 of those curves?

3 A Being on the top of the graph means you have lesser amount  
4 of compression noise, and that's better. Being on the left  
5 means you are requiring less number of bits to have certain  
6 amount of compression noise. Being on the left means you are  
7 requiring less number of bits, which is better because that  
8 means you have higher coding efficiency.

9 Q Can you tell us what the graph shows with respect to  
10 coding efficiency when you are comparing your macroblock pair  
11 AFF to picture level AFF?

12 A So if you take an example where you roughly draw a line  
13 for the same visual quality, let us say around number 32,  
14 which is 32 dB here, then you see that you achieve that kind  
15 of quality for a lot less bitrate in comparison to the code  
16 corresponding to picture level AFF, which is the yellow  
17 curve. If you drop down on the Xs, that will show roughly of  
18 the order of 20 percent improvement with MB pair AFF in  
19 comparison to picture AFF.

20 Q So there, MB pair AFF is 20 percent greater in efficiency  
21 than picture level AFF, correct?

22 A Yes, it is.

23 Q Now, in Figure 11, why did you compare macroblock pair AFF  
24 to picture level AFF, for instance, instead of single  
25 macroblock AFF?

1 A As I mentioned earlier, we were generally comparing the  
2 performance to the current state of the standard. Picture  
3 level AFF was the accepted -- a generally accepted concept to  
4 be included in the standard. So we were comparing the  
5 performance in relation to the picture level AFF.

6 Q Now, in the prior submission Motorola had been testing  
7 single macroblock AFF. What happened to that proposal?

8 A When we described our MB pair AFF proposal the committee  
9 liked it very much, and they enthusiastically embraced it.  
10 They also understand the logic behind using MB pair instead  
11 of single macroblock. So they dropped the concept of single  
12 MBAFF.

13 MS. HIGGINS: I don't believe I have offered  
14 Exhibit 2209. I hereby offer it, which is the JVT-B106 that  
15 we are discussing.

16 MR. CEDEROTH: No objection, your Honor.

17 THE COURT: It is admitted.

18 (2209 admitted.)

19 By Ms. Higgins:

20 Q Now, let's return back to the timeline. The second entry  
21 on the timeline refers to Exhibit 674, which is Motorola's  
22 C-139 submission. Did you co-author JVT-C139?

23 A Yes, I did.

24 MS. HIGGINS: Motorola offers Exhibit 674.

25 MR. CEDEROTH: It is the JVT?

1 MS. HIGGINS: Yes.

2 MR. CEDEROTH: No objection.

3 THE COURT: It is admitted.

4 (674 admitted.)

5 By Ms. Higgins:

6 Q The timeline shows Tables 3 and 4 from Page 6 of  
7 Exhibit 674. What bitrate do these tabs from 674 show?

8 A You can blow up that portion of the screen, please? I  
9 can't read it. Table 3 shows that bitrate savings by using  
10 MB pair adaptive coding over picture level adaptive coding.  
11 It shows that MB pair adaptive coding can save as much as  
12 18 percent of the bitrate.

13 Q Now, the third entry on the timeline refers to  
14 Exhibit 2274, which is a JVT-D081 submission. Do you  
15 recognize that submission?

16 A Yes, I do.

17 Q And that's a submission by Sony?

18 A Yes, it is.

19 Q And did you review that at the time it was submitted to  
20 the JVT?

21 A Yes, I did.

22 MS. HIGGINS: Motorola offers Exhibit 2274.

23 MR. CEDEROTH: No objection.

24 THE COURT: It is admitted.

25 (2274 admitted.)



1 By Ms. Higgins:

2 Q What is discussed in this document?

3 A Could you remind me of the number for this document?

4 Q Yes, sir. Exhibit 2227.

5 A For this display.

6 Q So it is 2274, the submission by Sony.

7 A I was asking for the display. I have to look here. This  
8 shows that Sony recommends MBAFF, which means MB pair AFF.  
9 They say this contribution provides supportive information of  
10 MB level field/frame adaptive coding. "We recommend the  
11 proposal be adopted."

12 Q Now, the fourth entry on the timeline refers to  
13 Exhibit 2227, which is JVT-E067, which is a submission by  
14 VideoTele.com. Did you review this document at the time it  
15 was submitted to the JVT?

16 A Yes, I did.

17 MS. HIGGINS: Motorola offers Exhibit 2227.

18 MR. CEDEROTH: No objection.

19 THE COURT: It is admitted.

20 (2227 admitted.)

21 By Ms. Higgins:

22 Q In Exhibit 2227 did VideoTele test Motorola's macroblock  
23 pair proposal?

24 A Yes, they did. They concluded our simulation results  
25 support that macroblock level frame/field adaptive coding is

1 a useful technique in the JVT standard, giving a bitrate  
2 saving of 11 percent to 18 percent on the two sequences  
3 tested.

4 Q Now, the final entry on the timeline refers to the H.264  
5 standard at Page 16. Was Motorola's MB pair AFF proposal  
6 adopted into the H.264 standard?

7 A Yes. Figure 6.4 shows that a frame or a picture can be  
8 broken down into a collection of macroblock pair.

9 Q Was Motorola granted any patents on its MB pair AFF  
10 invention?

11 A Yes, it was. That is under the name of MBAFF family.

12 Q Now, let's turn to Motorola's PAFF proposal. If you would  
13 turn in your binder to Exhibit 674, which is JVT-B071  
14 submitted by Motorola.

15 A Tell me the number again.

16 Q 674.

17 A That is JVT-C139?

18 Q Excuse me, 654, which is JVT-B071.

19 A I'm there.

20 Q Are you a co-author on this document?

21 A Yes, I am.

22 MS. HIGGINS: Motorola offers Exhibit 654.

23 MR. CEDEROTH: This is JVT-B071?

24 MS. HIGGINS: Correct.

25 MR. CEDEROTH: No objection.

1 THE COURT: It is admitted.

2 (654 admitted.)

3 By Ms. Higgins:

4 Q What did Motorola propose in B071?

5 A Motorola is proposing new technology associated with  
6 picture AFF and improvements to picture AFF for H.264  
7 standard.

8 Q Please turn to Figure 3 on Page 5 of Exhibit 654. At the  
9 top of the page in Figure 3, what is shown there?

10 A It shows one of the Motorola's invention associated with  
11 improving the performance of picture AFF. It shows that the  
12 current field can be predicted based upon the motion vector  
13 can be derived from the fields in the future, and their  
14 values can be obtained from what we call here MV2, the motion  
15 vector in field 2.

16 Q Let's turn to one of those curves. Please turn to  
17 Figure 23 on Page 18 of Exhibit 654.

18 A Okay.

19 Q That is the one on the bottom of the page.

20 A I'm there.

21 Q What does Figure 23 show?

22 A Again, it compares the performance of adaptive picture AFF  
23 in comparison to frame only coding and field only coding. It  
24 shows if you follow the same process, where we draw a  
25 horizontal line corresponding to certain visual quality, let

1 us say 33 dB. And then you see how many bits are required to  
2 achieve roughly that kind of quality. Then it shows that  
3 adaptive picture AFF can save in the order of 20 to  
4 30 percent bitrate, which means it is significantly more  
5 efficient for the sequence.

6 Q Now, the motion vectors that you were explaining in the  
7 previous document, did they help provide any additional  
8 performance --

9 A Yes, that --

10 Q -- in connection with picture AFF?

11 A Yes, that provided additional flexibility of how the  
12 motion is estimated and how the motion vectors are  
13 compressed. And it helped improve the performance further by  
14 lowering the bitrate.

15 Q And how does that affect coding efficiency?

16 A In lowering the bitrate you have better coding efficiency.

17 Q Did the JVT adopt Motorola's improved picture level AFF  
18 technology into the H.264 standard?

19 A Yes, it did.

20 Q Was Motorola granted any patents for its improved PAFF  
21 technology?

22 A Yes, it was. That is what I refer to as PAFF family.

23 MS. HIGGINS: May we approach one more time, your  
24 Honor, for one more board?

25 THE COURT: Yes.

1 By Ms. Higgins:

2 Q Now, let's turn up to a timeline on the Motorola scan  
3 family of patents. Did Motorola make submissions with  
4 respect to this patent family?

5 A Yes, it did.

6 Q The first entry on the timeline refers to Exhibit 675,  
7 Motorola's JVT-C140 proposal?

8 A Yes.

9 Q And in that proposal you were proposing new scans, a  
10 four-by-four scan and an eight-by-eight scan?

11 A Yes, we did.

12 Q Now, the first entry on the timeline shows a figure from  
13 Page 2 of Exhibit 675. What is shown in that figure?

14 A It shows Motorola's four-by-four scan pattern.

15 Q And in this submission to the JVT, did Motorola present  
16 test results for its new scans?

17 A Yes, as stated here, "Preliminary results with alternate  
18 scanning patterns have shown bitrate savings of up to about  
19 seven percent."

20 Q Now, the next entry on the timeline is JVT-D073, a  
21 submission by Samsung.

22 A Yes.

23 Q In this submission, did Motorola test -- excuse me, did  
24 Samsung test Motorola's four-by-four scan?

25 A Yes. And they stated, "The computer simulation

1 demonstrated that additional bitrate reduction of up to  
2 8.64 percent and 6.15 percent on average is possible. We  
3 would like to adopt the alternate scan in JVT."

4 Q Turning to the third entry on the timeline, JVT-E118, a  
5 submission by Sony.

6 A Yes.

7 Q What is discussed in this document?

8 A This is also providing the simulation results associated  
9 with alternate scans. And they conclude, "The simulation  
10 results show that by employing the proposed method a coding  
11 efficiency gain by up to three percent will be obtained."

12 Q Now, the final entry on the timeline refers to the H.264  
13 at Page 135. Does this show Motorola's four-by-four scan?

14 A Yes, it does.

15 Q Was Motorola's four-by-four scan adopted into the  
16 standard?

17 A Yes, it was.

18 Q And did Motorola also propose an eight-by-eight scan?

19 A Yes, it did.

20 Q And that scan was adopted into the standard?

21 A That scan was adopted in what we call Phase II, which was  
22 about a year after the first phase in 2004.

23 Q And Motorola has two patents on its scanned inventions,  
24 one for the four-by-four and one for the eight-by-eight scan?

25 A That's correct.

1 Q Now, had anyone, other than Motorola, proposed an  
2 alternate scan during the JVT submission process?

3 A Yes. The one that comes to mind was from Sony.

4 Q Please turn to Exhibit 653 in your binder.

5 A Okay.

6 Q Which is a submission B068 from Sony.

7 A Yes, it is.

8 Q Please turn to Page 3 of Exhibit 653.

9 A Okay.

10 Q Sony is proposing an alternate four-by-four scan there?

11 A Yes, it is.

12 Q How did Motorola's scan compare to Sony's scan?

13 A This scan looks a lot more complex to me, compared to  
14 Motorola's scan.

15 Q Please turn to Exhibit 2216, which is JVT-B001d5, which is  
16 an output document approved by the JVT.

17 A Yes, I'm there.

18 Q Are you a co-author on this document, sir?

19 A Yes, I am.

20 MS. HIGGINS: Motorola offers 2216.

21 MR. CEDEROTH: No objection.

22 THE COURT: Thank you. It is admitted.

23 (2216 admitted.)

24 THE COURT: Counsel, did you move on 653?

25 MS. HIGGINS: I don't believe so. I also need to

1 offer 675.

2 THE COURT: Let's do 653, and then we will do the  
3 next one.

4 MR. CEDEROTH: No objection.

5 THE COURT: And your next one is?

6 MS. HIGGINS: The next one is 675, which is a JVT  
7 submission, C140.

8 MR. CEDEROTH: Got it. No objection.

9 THE COURT: 675 is also admitted.

10 (653 & 675 admitted.)

11 MS. HIGGINS: One more, Exhibit 710.

12 MR. CEDEROTH: Sure. No objection.

13 THE COURT: 710 is admitted.

14 (710 admitted.)

15 By Ms. Higgins:

16 Q Getting back to this report in February 2002. Please turn  
17 to Page 28 of this report, where there is a discussion  
18 regarding Sony's B68 submission.

19 A I am there.

20 Q What did the JVT conclude regarding B68?

21 A As stated here, it says, "Small coding gain. Need to  
22 demonstrate larger gain for acceptance."

23 MS. HIGGINS: Pass the witness, your Honor.

24 THE COURT: Actually, you won't, because we are going  
25 to stop for the day.



1 MR. JENNER: Your Honor, if I may, in my sometimes  
2 role of John Alden speaking for Miles Standish, I have been  
3 asked by the third parties if I would bring to your Honor's  
4 attention again, that if your Honor will have a minute, the  
5 third-party licensees would like to be heard briefly as a  
6 result of your rulings earlier today about the briefing  
7 schedule. Mr. Zinedin would like to speak on behalf of  
8 Samsung, and perhaps some of the other third parties.

9 THE COURT: Counsel, go ahead and sit down. I am  
10 going to finish up today, and then I will touch on what you  
11 just said, Mr. Jenner. You can go ahead and step down, sir.

12 The schedule for Monday is -- We will talk about that in  
13 a moment. The trial schedule will be 9:00 a.m. to noon and  
14 1:00 p.m. to 4:00.

15 The time used today was Microsoft, two hours; Motorola,  
16 three hours and 30 minutes. And that means that Microsoft  
17 has remaining four hours and 40 minutes, and Motorola has  
18 remaining five hours and 35 minutes.

19 I will reiterate that I would like witnesses disclosed --  
20 Monday's witnesses disclosed by 4:30 on Saturday. If someone  
21 would be kind enough to call Mr. Fortney's number and tell us  
22 also so we can also prepare, that would be appreciated.

23 Counsel, at 8:45 on Monday, at which point I will have  
24 read the material in regards to the sealing question, I will  
25 hear argument, and try and save you some time off of your

1 trial day. And at that time I will be happy to hear from the  
2 third parties also. That will be the disposition of it,  
3 unless you are aware of something, Mr. Jenner, that makes  
4 that not functional.

5 MR. JENNER: I think there is a question of whether  
6 its third parties might have the opportunity to submit,  
7 either jointly or otherwise, a brief on behalf of themselves.

8 THE COURT: They are always welcome.

9 MR. JENNER: Sorry?

10 THE COURT: They are always welcome. Anything  
11 further, Mr. Harrigan?

12 MR. HARRIGAN: No, your Honor.

13 THE COURT: Mr. Jenner?

14 MR. JENNER: Nothing here, your Honor.

15 THE COURT: Have a nice weekend. I'm sure none of  
16 you have anything to do.

17 (Adjourned for the day.)

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## C E R T I F I C A T E

we, Debbie K. Zurn and Barry Fanning, Court Reporters for the United States District Court in the Western District of Washington at Seattle, do hereby certify that we were present in court during the foregoing matter and reported said proceedings stenographically.

We further certify that thereafter, we have caused said stenographic notes to be transcribed under our direction and that the foregoing pages are a true and accurate transcription to the best of our ability.

Dated this 18th day of December, 2012.

*/s/ Debbie Zurn, Barry Fanning*

DEBBIE ZURN/BARRY FANNING  
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